



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

### Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

### About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>



800  
300  
—

Transferred to  
CABOT SCIENCE LIBRARY  
June 2005

*L. C. Fraton.*

Formula for computing Profit after  
deduction of future Federal tax at  $12\frac{1}{2}\%$ .

$$\text{Profit} = \frac{\text{Opty Profit} \times 87\frac{1}{2}\%}{1 - (\text{Discount factor} \times 12\frac{1}{2}\%)}$$

(decimal)

From E.P. McCracken, Rev. Bur., Oct 30, 1926

1919.7

# Half Years

$\frac{1}{2}$  yr When Security Rate is 4%

$$\frac{1}{2} \quad (1.04)^{\frac{1}{2}} = 1.019804$$

$$1\frac{1}{2} \quad (1.04)^{1\frac{1}{2}} = 1.060596$$

$$2\frac{1}{2} \quad (1.04)^{2\frac{1}{2}} = 1.103020$$

$$3\frac{1}{2} \quad (1.04)^{3\frac{1}{2}} = 1.147140$$

$$4\frac{1}{2} \quad = 1.193026$$

$$5\frac{1}{2} \quad = 1.240747$$

$$6\frac{1}{2} \quad = 1.290377$$

$$7\frac{1}{2} \quad = 1.341992$$

$$8\frac{1}{2} \quad = 1.395672$$

$$9\frac{1}{2} \quad = 1.451498$$

$$10\frac{1}{2} \quad = 1.509559$$

See formula p<sup>xvii</sup> to

$$P = \frac{a}{\frac{r}{(1+r)^n - 1} + r'}$$

See also p. 134

ENGINEER'S VALUING ASSISTANT.

HARVARD UNIVERSITY



GEOLOGICAL SCIENCES

LIBRARY

From the

L.C. Graton Collection



# ENGINEER'S VALUING ASSISTANT

BEING A PRACTICAL TREATISE ON THE  
VALUATION OF COLLIERIES AND OTHER MINES

WITH RULES, FORMULÆ, AND EXAMPLES

ALSO

## A SET OF VALUATION TABLES

CALCULATED ON THE PRINCIPLE OF  
ALLOWING INTEREST TO A PURCHASER OF ANY ANNUITY, BENEFIT, OR  
INCOME, DERIVED, OR TO BE DERIVED FROM MINES OR  
OTHERWISE, AT ONE RATE OF INTEREST AND REDEEMING THE  
CAPITAL INVESTED AT ANOTHER PRACTICAL RATE  
OF INTEREST

AND

## TABLES OF VALUE

SHOWING THE DISCREPANCIES EXISTING IN THE ORDINARY TABLES  
OF PRESENT VALUES AND THE ERRORS CREATED BY THEM

BY

H. D. HOSKOLD

CIVIL AND MINING ENGINEER; CHIEF OF THE ARGENTINE GOVERNMENT  
NATIONAL OFFICES OF MINES AND GEOLOGY, ETC.

WITH AN INTRODUCTORY NOTE

BY THE LATE

PETER GRAY

HONORARY MEMBER OF THE INSTITUTE OF ACTUARIES  
AUTHOR OF 'TABLES AND FORMULÆ FOR THE COMPUTATION OF LIFE CONTINGENCIES' ETC.

SECOND EDITION

LONGMANS, GREEN, AND CO.

39 PATERNOSTER ROW, LONDON

NEW YORK AND BOMBAY

1905

TN  
272  
H82

# PREFACE

TO

## THE PRESENT EDITION.

---

Soon after the first edition of this work appeared in 1877, copies of it became so scarce that suggestions were frequently made to the author to publish a new edition of it; but, at that time, important professional duties and undertakings led him to foreign countries, including the Argentine Republic, in the latter of which he has had the honour of occupying the position of Chief Advising and Acting Mining Engineer to the National Government for over a period of 18 years. The onerous duties of that office, and other matters connected therewith, absorbed the whole attention of the author, and it is only recently that he has been able to prepare a second edition of his 'Engineer's Valuing Assistant' for the press.

For various practical reasons, the original book of 1877 has been reduced in bulk; but, at the same time, everything essentially necessary to aid the profession in the valuation of mines and other properties has been retained in the present edition.

The deferred periods, in Table X, have been reduced from 10 to 4 years, for the reason that it is considered that a period of from 4 to 5 years is a sufficiently long time to wait before benefit accrues from mining undertakings.



Tables XIV, XV, XVI, XVII, and XVIII, giving deferred periods up to 5 years, have been retained to meet special cases.

The general examples of mine-valuation, occurring in the first edition, are omitted, a single leading example, with peculiar characteristics, having only been retained.

The excellent and important 'Introductory Note,' contributed to the first edition by the late lamented Mr. Peter Gray, one of the ablest mathematicians of his time, has also been retained, not only on account of its great value in demonstrating scientifically the correctness of the principles laid down by the author, but as a memorial to that distinguished scientist. The references only have been altered, to agree with present pagination.

The author again takes this opportunity of expressing his thanks to the scientific press for the favourable opinions manifested upon the merits of the first edition, and he is content to present this second edition to their consideration, liberality, and just appreciation.

BUENOS AIRES: *May* 1, 1904.

# PREFACE

TO

## THE FIRST EDITION.

---

THE efforts put forth in the literary world at the present time, and the facility of production and means of distributing the results of such labours, are truly astonishing, and without a parallel in past times, and for the multiplication of Books of all classes there seems to be a growing necessity, but although various subjects connected with Arts, Sciences, and Manufactures have been largely treated upon, that of the Valuation of Mines has been entirely neglected.

This circumstance is the more surprising inasmuch as the subject is one of great national importance, affecting as it does, —at least in some degree—the interest of all those who are connected with Mining and other branches of industry.

In these times, commercial prosperity in general seems to depend more or less upon its relations to honest and successful Mining adventure; and although Mining and other branches of trade have received and will still receive healthy stimulus, nevertheless there are periods of reaction, causing depression, the origin of which it is not always easy to trace and explain. However, in very many cases it may be referred to inflated notions of speculation, creating undue excitement, error in judgment, and an unwarrantable lavish expenditure of capital

upon properties not capable of yielding profits compatible with the outlay.

Immense sums of money are frequently spent in the purchase of mineral properties, and it is a common occurrence that much more is paid in order to secure them than they are really worth, and cases coming within experience are by no means few where the estimated value has exceeded the true value by 40 or 50 per cent., due in many cases to the employment of an erroneous years' purchase. Table XII exhibits the *source* of such discrepancies.

True value, and the economic expenditure of money upon the purchase and development of any property, are therefore matters of such paramount importance, that it has been considered necessary for the general interests of the public to point out in this work, and illustrate by ample practical examples, how such discrepancies as those referred to have arisen, and the means necessary to be adopted in guarding against such an enormous waste of Capital.

Taking a rational view of the matter, it is desirable that any mode of deducing Values, having for its basis nothing better than an approximate rule, or a mere guess, should yield to more accurate treatment; and as the interest at stake is so great, and almost universal, it seems to be most essential that the public should possess some standard work of reference—embodying information and easy rules of a reliable and practicable character, so that by mere consultation, the comparative merits and value of Mineral and other kinds of property that may come under consideration may be readily determined. Hitherto, however, no work of this description and specially devoted to this subject has appeared.

The present work is therefore an attempt to supply this need; and it has been written chiefly with a view to facilitate such calculations as <sup>are</sup> required generally, and especially by

those of the Profession on whom more particularly devolve the important and onerous duties connected with Valuation, to introduce a general system based upon equitable and scientific principles, and to assist in obtaining more uniformity and accuracy in general practice.

In past years, when I was extensively engaged in valuing coal and other mines, the labour connected with the necessary and frequent calculations involving the use of rules derived from first principles became so tedious, that I determined once for all to prepare full and complete sets of Tables required, to be employed in Valuation as *labour-savers*.

After much thought and labour this task has been completed, and the result supplied by the publication of this work, in which I have endeavoured throughout to render the treatment of the subject as simple and intelligible as its nature seemed to admit of, and, as I believe, free from all unnecessary mathematical surroundings.

I particularly desire to record my thanks to many friends for their kindness in expressing a favourable opinion of my work while it was in MS., and for encouragement which I received from them as to the necessity for the publication of such a work. Among these gentlemen I may specially mention such eminent authorities as Peter Gray, Esq., F.R.A.S., F.R.M.S., M.Inst.A., London; Robert Hunt, Esq., F.R.S., Keeper of the Crown Mining Records, Museum of Practical Geology, Jermyn Street, S.W.; J. Pease, Esq., M.P., Hutton Hall, Gisborough; Warrington W. Smyth, Esq., M.A., F.R.S., F.G.S., Chief Inspector of Crown Mines, Museum, Jermyn Street; D. T. Ansted, Esq., M.A., F.R.S., F.G.S., Melton, Suffolk, and 4 Westminster Chambers, Westminster; Emerson Bainbridge, Esq., M.E., Assoc. Inst.C.E., Mining Engineer to the Duke of Norfolk, Nunnery Colliery Offices, Sheffield; Thos. Wm. Lewis, Esq., F.G.S., M.Inst.C.E., Civil and Mining Engineer (*Past President of the South Wales Inst. of Engi-*

neers), Agent to the Marquis of Bute, Bute Estate Office, Mardy, Aberdare; George C. Greenwell, Esq., F.G.S., Mining Engineer to Lord Vernon, Poynton House, Stockport; Alexander Bassett, Esq. (*Past President of the South Wales Inst. of Engineers*), M.Inst.C.E., Civil and Mining Engineer, Agent to Lord Tredegar, Tredegar Estate Office, Cardiff; J. B. Simpson, Esq., M.E. (*Member of Council of the North of England Inst. of Engineers*), Hedgefield House, Blaydon-on-Tyne; John Daglish, Esq., M.E., F.G.S. (*Vice-President of the North of England Inst. of Engineers*), Tynemouth; John Thomas Bewick, Esq., M. and C.E., F.G.S., M.Inst.C.E. (*Vice-President of the North of England Inst. of Engineers*), Haydon Bridge, Northumberland; Thomas Fenwick Hedley, Esq., Valuer and Arbitrator, Sunderland; Richard Bedlington, Esq., M.E. (*Past President of the South Wales Inst. of Engineers*), Gadly's House, Aberdare; Hort. Huxham, Esq., F.G.S., M.Inst.C.E. (*Secretary of the South Wales Inst. of Engineers*), Consulting Mining and Civil Engineer, Swansea; Theo. Wood Bunning, Esq., Neville Hall, Newcastle-on-Tyne (*Secretary to the North of England Inst. of Engineers*), and Messrs. Hale and Wilson.

I am greatly indebted to the first-named gentleman for the exceedingly valuable and lucid Introductory Note prefixed to this work. The name of so eminent a mathematician and author is of itself a sufficient guarantee of the accuracy of the principles involved in a work with which he may in any way be connected.

I now leave the work in the hands of an enlightened public, venturing to express a hope that it may prove as much a benefit to them as it has been a pleasure to me in writing it, and I take this opportunity of expressing my grateful acknowledgments for the liberal support and encouragement accorded to my former publications.

H. D. HOSKOLD.

LONDON: May 1877.

# INTRODUCTORY NOTE

BY

PETER GRAY, F.R.A.S.

*Honorary Member of the Institute of Actuaries, and Author of 'Tables and Formulae  
for the Computation of Life Contingencies' &c.*



## INTRODUCTORY NOTE.

---

THE present Work, on the subject of the Valuation of Mineral Property, contains matter of very great interest for both the Professional Valuer and the Actuary:—for the former in its ample discussion of the principles which should guide him in the discharge of his duties; and for the latter in its treatment of the problems (of a somewhat unusual character) which arise in the practical application of those principles, as well as in the mass of Original Tables it contains, specially adapted for the easy and exact solution of any case that may present itself. The Tables occupy no fewer than 157 pages, and of themselves form a standing monument to the perspicacity and industry of the author.

There is found to exist among professional valuers some diversity of opinion and practice in regard to certain points in the purely actuarial portion of their work; and upon these points I have been requested to give my opinion. I will do so as briefly and plainly as I can, supporting my views with the requisite amount of demonstration, occasionally diverging, perhaps, into cognate matters that may press themselves on the attention.

The course of proceeding in the Valuation of a Mine appears to be as follows:—The valuator, in the exercise of his professional skill and knowledge, names a sum and a term of years, the former to be considered as the annual income to be derived from the mine, and the latter as the number of years that this income is to last. It is further arranged between the parties, that the purchaser is to be allowed a specified rate of interest on his outlay, during the entire term. The required value is thus presented in the form of an annuity certain, the elements of which—the sum, the term, and the rate—are known; and there remains only the conversion of that value into a present sum.



One of the points on which I am requested to give my opinion is as to the correct method of valuing the annuity which forms the subject of the valuator's first determination.

Ordinarily the valuation of an annuity for a term of years, when the rate of interest to be allowed to the purchaser has been arranged, is a sufficiently simple matter. The well-known tables of Smart (reproduced by Jones in his *Treatise on Annuities*), and others, furnish, in the cases that usually arise, all the aid that can be required, even by the most inexperienced computer. But the cases with which we have here to do are somewhat complicated by the entrance of a consideration that does not present itself—in so pressing a way, at least—in general practice.

It cannot be doubted that the purchaser of an annuity for a term, on which he is to be allowed interest at a specified rate, ought, as regards this transaction, to be in the same position, pecuniarily, at the end of the term, as if he had lent his money during the term at the same rate. The lender receives his interest annually, and has the sum lent returned at the end of the term. But the purchaser of an annuity must recoup himself by investing the excess of his annuity over the annual interest on his outlay, at such a rate that at the end of the term his capital will be reproduced. The lowest rate at which this reproduction can be *assumed* by the vendor or purchaser to be effected, is the rate allowed in the purchase of the annuity, as will presently be shown. In the case of annuities purchased at current rates, but little inconvenience and loss will occur to the purchaser from this restriction as to the rate of re-investment, since *practicable* rates in respect of such will usually differ but little from the *stipulated* rates. In the cases with which we are here concerned, however, the state of matters is far otherwise. In the purchase of mining property the purchaser, for reasons with which we have nothing here to do—they are fully discussed in the following work—is usually, perhaps always, allowed a rate of interest on his outlay far exceeding that at which he can invest the surplus of his annuity, which is called with propriety the *Redemption Fund*; and hence, if the *ordinary tables* are used in the valuation of the annuity determined and assigned by the valuator, the result must be a loss to the purchaser, more or less heavy according to circumstances, since

in them the difference between the two rates is ignored. In the present connection, therefore, special methods must be employed.

I will show here, first, that to reproduce the capital at the end of the term, when the tabular value of the annuity is used, the redemption fund must be invested at the *stipulated* rate, that is, the rate allowed to the purchaser; and I will then show how, when the *practicable* rate is taken account of, the value of the annuity may be correctly determined.

Denote by  $a$  the annuity for  $n$  years, and by  $P_n$  the purchase money, which is to yield the purchaser  $r'$  per £ on his investment.

The tabular value of the annuity is, we know,

$$P_n = \frac{a(1 - v^n)}{r'}, \quad \text{where } v = \frac{1}{1 + r'}; \dots (A)$$

whence

$$a = \frac{P_n r'}{1 - v^n}$$

Now, a year's interest on  $P_n$ , the purchase-money, is  $P_n r'$ , and therefore, in accordance with what is above stated,

$$a - P_n r', \text{ or } \frac{P_n r'}{1 - v^n} - P_n r',$$

is the redemption fund; and it has to be shown that this, if invested as it accrues, at the rate  $r'$ , will amount to  $P_n$  in  $n$  years.

$$\frac{P_n r'}{1 - v^n} - P_n r' = \frac{P_n r' - P_n r'(1 - v^n)}{1 - v^n} = \frac{P_n r' v^n}{1 - v^n}.$$

Multiplying numerator and denominator by  $(1 + r')^n$ , this expression becomes,

$$\frac{P_n r'}{(1 + r')^n - 1};$$

and this we know is the annuity which, at the rate  $r'$ , will amount to  $P_n$  in  $n$  years. And it is thus shown that when the value of an annuity is determined by the *common tables* (for those tables consist of series of values of  $\frac{1 - v^n}{r}$ ), it is neces-

sary, in order that the capital shall be reproduced at the end of the term, that the redemption fund should be invested at the rate allowed to the purchaser.

I am now to show how, when the stipulated rate—that allowed to the purchaser—is  $r'$ , and the practicable rate—that at which the redemption fund can be invested—is  $r$ , the correct value of the annuity may be determined.

Let, as before,  $a$  be the annuity for  $n$  years to be purchased, and  $P_n$  the purchase-money.

The redemption fund is  $a - P_n r'$ ; and if we denote by  $M_n$  the amount of an annuity of £1, for  $n$  years, at the rate  $r$  (the *practicable* rate), the amount of the redemption fund at the end of the term will be  $(a - P_n r')M_n$ . Hence, since this, by condition, is to equal the purchase-money, we have the following equation:—

$$P_n = (a - P_n r')M_n;$$

and from this we get,

$$P_n = \frac{aM_n}{1 + r'M_n} \cdot \cdot \cdot \cdot (1)$$

This is the value required; and it is in a form very convenient for calculation, either by logarithms or otherwise. The form, however, may be varied. Thus, dividing numerator and denominator by  $M_n$ , we have,

$$P_n = \frac{a}{\frac{1}{M_n} + r'}; \cdot \cdot \cdot \cdot (2)$$

and  $\frac{1}{M_n}$  being the annuity which will amount to £1 in  $n$  years—in other words, the redemption fund necessary to produce £1 in that time—at the rate  $r$ , if for  $\frac{1}{M_n}$  we write  $s_n$ , the expression assumes the more compact form,

$$P_n = \frac{a}{s_n + r'}; \cdot \cdot \cdot \cdot (3)$$

and this is the most convenient for use when, as in the present volume, we are furnished in Table V with the values of  $s_n$  for all terms and rates that can present themselves in practice.

The form chiefly, for special reasons, used by Mr. Hoskold in the body of the work, is the basis of (3), by substituting in it for  $s_n$  its value,  $\frac{r}{(1 + r)^n - 1}$ .

We thus have,

$$P_n = \frac{a}{\frac{r}{(1+r)^n - 1} + r'}, \text{ or } \frac{a}{\frac{r}{R^n - 1} + r'}, \dots (4)$$

*This is the "Hoskold formula"*

writing  $R$  for  $1+r$ .

I give now a numerical example, in further illustration of what precedes.

Let the annuity be £100 for 20 years, on which the purchaser is to be allowed 5 per cent., while the redemption fund can be invested only at 3 per cent. The present value—the purchase-money—is required.

I shall solve this first by the formula (4), which ignores the difference between the stipulated and the practicable rates.

The formula is, for this case,

$$P_{20} = \frac{100(1 - v^{20})}{\cdot 05}.$$

This might be worked by Table IV, which gives the value of  $v^n$  for all required rates and terms. But it is easier to take at once the value of the annuity of £1 for 20 years, from Table XII, p. 170. We thus have  $P_{20} = £1246\cdot221$ .

This value fulfils the condition of replacing the capital at the end of the term, if the redemption fund can be invested at 5 per cent.

Thus, a year's interest on the capital is 62·311, and hence the redemption fund is  $100 - 62\cdot311 = 37\cdot689$ . Now, the amount of £1 per annum in 20 years, at 5 per cent., being (Table III, p. 64) 33·0660, that of 37·689 will be  $33\cdot066 \times 37\cdot689 = £1246\cdot223$ , establishing the theorem.

On the other hand, if the redemption fund can only be invested at 3 per cent., its amount at the end of the term will be no more than (p. 62),

$$26\cdot8704 \times 37\cdot689 = £1012\cdot718,$$

showing a deficiency of £233·503.

I now give a correct solution by (3).

The formula is,

$$P_{20} = \frac{100}{s_{20} + \cdot 05}$$

$$\begin{array}{rcl}
 s_{20} \text{ (p. 82)} & \cdot 03721571 \text{ at 3 per cent.} & \\
 \cdot 05 & \cdot 05 & \\
 & \hline
 & \cdot 08721571 & \log \overline{2}9405948 \\
 & & \text{colog } 1\cdot 0594052 \\
 & 100 & \log 2 \cdot \\
 P_{20} & 1146\cdot 582 & \log 3\cdot 0594052
 \end{array}$$

Hence, £1146·582 is the value sought, and it fulfils the prescribed condition as follows:—

A year's interest on  $P_{20}$ , at 5 per cent. is 57·329, and the redemption fund, therefore, is  $100 - 57\cdot 329 = 42\cdot 671$ . And  $26\cdot 8704 \times 42\cdot 671 = £1146\cdot 582$ , as it ought to do.

It is needless to enter on an inquiry as to the comparative advantages of the expressions that have been given for the solution of the problem under consideration, for in truth almost every case under the problem that can present itself has been already solved, and the solution is recorded in the following work; so that it is very rarely indeed that there will be occasion to have recourse to any formula. Tables VI to IX, occupying pages 93 to 139, give the years' purchase, that is, the value of  $P_n$  on the supposition that the annuity to be purchased is £1, for every *practical* combination of the stipulated and the practicable rates, with the element  $n$ , the duration of the annuity; so that to complete the valuation there only remains the multiplication of the proper tabular value by the annuity whose value is required. The process, in fact, is entirely assimilated to that requisite in the use of the *common tables*, with the important distinction in the results that, in Mr. Hoskold's tables, due account is taken of the disparity between the stipulated and the practicable rates, while in the common tables this disparity is altogether ignored.

Table XII is very instructive. It shows, for various combinations of the *stipulated* and the *practicable* rates, the excess of value assigned by the *old* (the common) tables over the true value for every pound of annuity purchased. I leave this table to make its own impression.

I have now indicated with sufficient distinctness that the method of valuation which I have sought to illustrate, and which is that advocated and employed by Mr. Hoskold, is the correct one. But before leaving the subject I would call attention to

a variety of the problem which presents itself to be dealt with when, as is sometimes the case, the annuity to be purchased is deferred; that is, which, while making the same number,  $n$ , does not commence its payments till after the lapse of, say,  $t$  years. The symbol for the value of the annuity, when subject to this condition, might with propriety be  $P_{t:n}$ .<sup>1</sup>

The value here, in accordance with a well-known principle, is,

$$P_{t:n} = v^t P_n \text{ or } \frac{P_n}{(1 + r')^t};$$

equivalent forms, since  $v^t$  and  $(1 + r')^t$  (in which  $r'$  is the stipulated rate), are reciprocal, each to the other; and hence, when the value of an immediate annuity is found (or known), that of the same annuity, when deferred, can be readily deduced.

A demonstration is given also, by Mr. Hoskold, on p. 12, founded on elementary principles. And I may remark that it is, as I believe, only now, that, for the first time, the value of the deferred annuity is correctly assigned.

Here, too, as in the case of the immediate annuity, the wants of the computer have been anticipated and supplied by Mr. Hoskold. Tables X and XI, occupying pages 141 to 166, contain the values, for most practical rates, of a deferred annuity of £1 (the number of years' purchase), the periods of deferment ranging from 1 to 4 years. In consequence, the necessity for having recourse to a formula will very rarely occur, the value required in any particular instance being usually obtainable from the tables named by the merest inspection.

It is only such as have had some experience in the construction of tables who will be able to realise the great amount of labour involved in the formation of those that have been specially referred to—I mean Tables VI to XI; but it is very certain that

<sup>1</sup> Mr. Hoskold uses  $P_{t+n}$ . The form above suggested seems on the whole preferable; the suffix  $t + n$ , being the sum of the periods of deferment and duration together, is the entire term over which the transaction extends. [I will add that, having *instinctively* here written *deferment*, while Mr. Hoskold writes *deferrence*, I have been accustomed to do so on the authority of the late Prof. De Morgan (*Compan. to the Almk.*, 1840, p. 16). I find neither of the words in the dictionaries to which I have present access; probably, therefore, both may be equally legitimate—or illegitimate.]

everyone who may have occasion to use them for practical purposes will bear willing testimony to their great utility.

On pages 8 to 10 Mr. Hoskold points out, demonstrates, and freely uses a relation that may be thus enunciated:—

The annuity for  $n$  years that £1 will buy, exceeds the annuity that will amount to £1 in  $n$  years, by  $r$ , the interest of £1 for a year.

This relation I find is not unknown to some actuaries; nevertheless, as it has not yet, so far as I know, found its way into the books, it may be worth while here to place it on record.

The proof is very simple. The annuity for  $n$  years that £1 will buy is,

$$\frac{r}{1 - v^n},$$

which we may write thus,

$$\frac{r(1 + r)^n}{(1 + r)^n - 1};$$

and the annuity that will amount to £1 in  $n$  years is

$$\frac{r}{(1 + r)^n - 1}.$$

Subtract now the second from the first, and we get

$$\frac{r(1 + r)^n}{(1 + r)^n - 1} - \frac{r}{(1 + r)^n - 1} = \frac{r\{(1 + r)^n - 1\}}{(1 + r)^n - 1} = r;$$

and so the theorem is established.

The foregoing relation can be shown to hold from other considerations than those adduced above. The formula (3), p. xvi, *ante*, when  $a = 1$ , becomes

$$P_n = \frac{1}{s_n + r'},$$

and denotes the value of an annuity of £1 for  $n$  years, at the rate  $r'$ , when the redemption fund is invested at the rate  $r$ ; and if  $r' = r$ , the value indicated is that of the ordinary annuity. In this case then  $s_n + r$  will be the annuity for  $n$  years that £1 will buy, since this annuity and its present value are mutually reciprocal. And hence, since  $s$  is the annuity that in  $n$  years will amount to £1, we again see the relation to subsist.

I will just add by way of corollary, that, the value of the annuity which £1 will buy being of course £1, and that of the annuity which in  $n$  years will amount to £1 being  $v^n$  (since this is the value of £1 to be realised in  $n$  years), the difference of these values is  $1 - v^n$ . Now this must be the value of an annuity of  $r$ , (the quantity by which the annuities themselves differ,) for  $n$  years. And this is seen to be the case as follows:—

$$\frac{1 - v^n}{r} \times r = 1 - v^n.$$

There is another point in the valuation of Mining Property in regard to which diversity of opinion and practice exists among valuers; and on which also I have been requested to give my opinion. The point here referred to arises as follows:—

A mine is to be sold having a specified term to run. The valuator, in the exercise of his best judgment and technical skill, assigns the annuity on which the purchaser may probably reckon during the term of duration, with the rate of interest to be allowed him on the purchase-money. Here a new consideration sometimes—perhaps I should say frequently—arises. The sum named by the valuator as the probable annual return to the purchaser is that which he considers ought to be the return if the mine is fully developed. At the same time he may be of opinion that to bring the mine into this condition an expenditure of greater or less amount in the early years of the mine is necessary. In these circumstances he does not abate from his estimated annual return, but names a sum, as cost of development, to be expended by the purchaser in equal portions during the first few years of the mine, to bring the mine into the required condition; and which sum consequently, when valued subject to the conditions of its disbursement, will constitute a deduction to be made from the gross value of the mine, so as to determine the amount of the portion of this value payable to the vendor. And it is as to the manner in which this deduction is usually made that I am requested to give my opinion.

For illustration I quote a case given by Mr. Hoskold, p. 26.

The term of a colliery for the next 21 years is to be sold. It at present yields a net return of £8,000 per annum; and the valuator estimates that to maintain the return at this rate,



during the term, it will be necessary for the purchaser to expend in works, &c., £12,000, in equal portions of £4,000 during each of the next 3 years. Also, the purchaser is to be allowed 20 per cent. per annum on his outlay, redeeming his capital at 3 per cent. Required the net amount now payable.

I will determine the required amount first in the customary way.

By Table VII, p. 120, the gross value of the mine is  
 $4\cdot25764225 \times 8,000 =$  £34,061·138

And the abatement is :—

Cost of works, &c. . . . . £12,000

Interest on the same, 3 years at

5 per cent. . . . . 1,800

13,800·000

Net amount now payable . . . . . £20,261·138

Now this cannot be correct. The abatement here is the *amount* in 3 years, at 5 per cent. simple interest, of the disbursements *to be made* by the purchaser; and it could be legitimate only if the entire £12,000 had been disbursed *three years ago*. The purchaser in fact *receives a bonus* for delaying payment of a portion of the purchase-money—a bonus, moreover, which *increases as the delay increases*.

Surely nothing further needs be said to establish the inadmissibility, in accordance with any rational or recognised principle, of the method just exemplified for determining the net amount now payable.

The following shows the manner in which I consider the required determination ought to be made :—

Gross value as before, . . . . . £34,061·138

Abatement for cost of works :—

Value of an annuity of

£4,000 for 3 years, at 3

per cent. (Table XIII)

$2\cdot82861 \times 4000 =$

11,314·440

Net amount now payable, . . . . . £22,746·698

The annual payments to be made by the purchaser constitute an annuity, and there exists no conceivable reason why they should not be valued as such.

The only point in regard to which there may be thought to be room for question as to the validity of the method here employed, is the rate at which the annuity of £4,000 ought to be valued; and somewhat plausible reasons might be adduced for making the valuation at the rate of 20 per cent. I am quite satisfied, however, after full consideration, that any arguments in this sense that could be assigned are groundless. The purchaser is entitled to £20 per cent. on his outlay, which is the gross value of the mine. It is true that a portion only of this—in the present case the larger portion—goes at once into the pocket of the vendor; but the rest is expended in the amelioration of the property, whereby the purchaser is proportionally benefited.

I am pleased to find myself in regard to this second method of solution in entire accordance with Mr. Hoskold, who has largely attended to the subject; and whose remarks on pp. 26 to 28 I commend to careful consideration.

P. GRAY.

LONDON: *June 11, 1877.*



# CONTENTS.

	PAGE
PREFACE TO THE PRESENT EDITION . . . . .	v
PREFACE TO THE FIRST EDITION . . . . .	vi
INTRODUCTORY NOTE . . . . .	xi

Nature and value of annuities—Increase of the principal, demonstrated by examples—Present value of a perpetuity of £1 payable once in every  $n$ th year, the first payment due  $n$  years hence; formula, rule, and examples—Present value of a perpetuity of £1 deferred  $n$  years; formula, rule, and examples—Theory and formula, rule and examples—Theory and practical mode of ascertaining the advantage of payment of annuities, benefits, or incomes at varied intervals; value by yearly, half-yearly, and quarterly payments—Amount of £1 per annum, in  $n$  years; formula, rules, and example—Present value of £1 due  $n$  years hence; formula, rule, and examples—The annuity, benefit, or income, which £1 will purchase, found by adding together the redemption fund and rate of interest—Redemption fund required to reproduce £1 in  $n$  years; formula, rule, and examples—Present value of £1 per annum for  $n$  years, allowing one rate of interest on purchase-money, and another rate of interest for redemption of capital; formula, rule, and examples—Recapitulation of formulæ—Examples illustrative of, and demonstrating the accuracy of the formulæ—Deferred annuities, benefit, or income, with two different rates of interest; formulæ, rule, and examples, with doctrine—General discussion of the subject, with further examples; formulæ and rules—Erroneous opinions referring to deferred annuities, with a demonstrative analysis of the proper mode of determining such questions; with further formulæ, rules, and examples—Redemption of capital; with examples—Conditions considered in forming the tables of value—The tables calculated from first principles—Inaccurate tables worse than useless—Tables great labour-savers, as values may be found by mere inspection—Tables have been frequently published, on erroneous basis, but not higher than 10 per cent,—

	PAGE
Tables of this work originally calculated to fifteen places of decimals—Proof of difference between erroneous and correct tables; with examples—Rate of interest allowed on mines—Errors in the construction of Inwood's tables—Examples demonstrating the amount of error by the use of such tables—Thoman's rule for deferred values—Correct formula and rule, with examples, showing difference in value between it and Thoman's rule—Difference of value between correct rule and Inwood's rule, showing the amount of loss to a purchaser by valuing mines by his and other old tables—Practical and leading examples in the valuation of mines . . . . .	1-28

## TABLES.

## TABLE

- I. Amount of £1 in any number of years to 100, at  $\frac{1}{2}$ ,  $\frac{3}{4}$ , 1,  $1\frac{1}{4}$ ,  $1\frac{1}{2}$ ,  $1\frac{3}{4}$ , 2,  $2\frac{1}{4}$ ,  $2\frac{1}{2}$ ,  $2\frac{3}{4}$ , 3,  $3\frac{1}{4}$ ,  $3\frac{1}{2}$ , 4,  $4\frac{1}{4}$ , 5,  $5\frac{1}{2}$ , 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, and 25 per cent. Calculated to 10 places of decimals to 9 per cent., 6 places to 15 per cent., and to 5 places to 25 per cent., . . . . . 29
- II. Amount of £1 in any number of years to 100, at the rate of 3 per cent. Half-yearly and quarterly payments. Calculated to 10 places of decimals, . . . . . 49
- III. Amount of £1 per annum in any number of years to 100, at the rates of  $\frac{1}{2}$ ,  $\frac{3}{4}$ , 1,  $1\frac{1}{4}$ ,  $1\frac{1}{2}$ ,  $1\frac{3}{4}$ , 2,  $2\frac{1}{4}$ ,  $2\frac{1}{2}$ ,  $2\frac{3}{4}$ , 3,  $3\frac{1}{4}$ , 4,  $4\frac{1}{2}$ , 5,  $5\frac{1}{2}$ , 6, 7, 8, 9, and 10 per cent. Calculated to 10 places of decimals, . . . . . 55
- IV. Present value of £1 due  $n$  years hence, at 3,  $3\frac{1}{4}$ , 4,  $4\frac{1}{2}$ , 5, 6, 7, 8, 9, and 10 per cent. to 100 years, and at 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, and 25 per cent. to 50 years. Calculated to 8 places of decimals, . . . . . 69
- V. Redemption funds necessary to produce £1 in  $n$  years, up to 100, at the rates of  $1\frac{1}{2}$ , 2,  $2\frac{1}{2}$ , 3,  $3\frac{1}{4}$ ,  $3\frac{1}{2}$ , 4,  $4\frac{1}{4}$ ,  $4\frac{1}{2}$ , and 5 per cent., calculated to 10 places of decimals; and for rates of 10, 12, 15, 18, and 20 per cent., calculated to 10 places of decimals, and for 50 years. Also, for rates of 3,  $3\frac{1}{4}$ ,  $3\frac{1}{2}$ ,  $3\frac{3}{4}$ , 4,  $4\frac{1}{4}$ ,  $4\frac{1}{2}$ ,  $4\frac{3}{4}$ , and 5 per cent., payments being made half-yearly and quarterly; calculated to 6 places of decimals, and to 100 years, . . . . . 79
- VI. Present value of £1 per annum, redemption of capital being at  $2\frac{1}{2}$  per cent., and interest at the rates of  $3\frac{1}{2}$ , 4,  $4\frac{1}{2}$ , 5,  $5\frac{1}{2}$ , 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, and 25 per cent.; calculated to 8 places of decimals and to 100 years, . . . . . 93

TABLE	PAGE
VII. Present value of £1 per annum, redemption of capital being at 3 per cent., and interest at the rates of $3\frac{1}{2}$ , 4, $4\frac{1}{2}$ , 5, $5\frac{1}{2}$ , 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, and 25 per cent.; calculated to 8 places of decimals and to 100 years, . . . . .	109
VIII. Present value of £1 per annum, redemption of capital being at $3\frac{1}{2}$ per cent., and interest at the rates of 4, 5, 6, 8, 10, 12, 15, 18, 20, and 25 per cent.; calculated to 8 places of decimals and to 100 years, . . . . .	125
IX. Present value of £1 per annum, redemption of capital being at 4 per cent., and interest at the rates of 5, 6, 8, 10, 12, 15, 16, 18, 20, and 25 per cent.; calculated to 8 places of decimals and to 100 years, . . . . .	133
X. Present value of £1 per annum, deferred 1, 2, 3, and 4 years, redemption of capital being at 3 per cent., and interest at the rates of 4, 5, 6, 8, 10, 12, 15, 18, and 20 per cent.; calculated to 6 places of decimals and to 100 years, . . . . .	141
XI. Present value of £1 per annum, deferred 1, 2, 3, and 4 years, redemption of capital being at $3\frac{1}{2}$ and 4 per cent., and interest at the rate of 20; calculated to 6 places of decimals and to 100 years, . . . . .	161
XII. Comparison of the difference in value between the <i>old or ordinary</i> tables of present values, and a portion of the <i>new</i> tables calculated for this work, which allow one rate of interest on capital and another rate for its redemption, for rates of interest at 4, 5, 8, 10, 12, 15, 18, and 20 per cent., showing the amount and rate per cent. lost on the purchase of every £1 annuity, by the use of the <i>old</i> tables; calculated to 5 places of decimals and to 50 years, . . . . .	167
XIII. Present value of £1 per annum in $n$ years, redemption of capital being at 2 and $2\frac{1}{2}$ per cent., with interest at the same rates per cent.; calculated to 5 places of decimals and to 100 years, . . . . .	177
XIV. Present value of £1 per annum in $n$ years; redemption of capital being at 3 per cent., with interest allowed upon capital at the rate of 30, 35, 40, and 45 per cent. per annum, . . . . .	181
XV. Present value (or years' purchase) of £1 per annum in $n$ years, after $t$ years of deference; redemption of capital being at the rate of 3 per cent., with interest allowed to a purchaser at 30 per cent. per annum, deferred 1, 2, 3, 4, and 5 years, . . . . .	182

TABLE	PAGE
XVI. Present value (or years' purchase) of £1 per annum in $n$ years, after $t$ years' deference; redemption of capital being at 3 per cent., with interest allowed to a purchaser at 35 per cent. per annum, deferred 1, 2, 3, 4, and 5 years, . . .	183
XVII. Present value (or years' purchase) of £1 per annum in $n$ years, after $t$ years' deference; redemption of capital being at 3 per cent., with interest allowed to a purchaser at 40 per cent. per annum, deferred 1, 2, 3, 4, and 5 years, . . .	184
XVIII. Present value (or years' purchase) of £1 per annum in $n$ years, after $t$ years' deference; redemption of capital being 3 per cent., with interest allowed to a purchaser at 45 per cent., deferred 1, 2, 3, 4, and 5 years, . . .	185

# CONSTRUCTION AND USE OF VALUATION TABLES,

WITH

RULES AND FORMULÆ.

---

EVERY beneficial interest or sum of money accruing, or to accrue, and to be paid at the end of a year, or portion of a year, may be considered as an annuity, and may be either terminable with the life of an individual or perpetual. Any sum of money left unpaid for a certain number of years is called an annuity in arrear, and when not payable until after a fixed number of years it is said to be a reversionary or deferred annuity.

In either case the annuity is transferable, and may be purchased on certain agreed terms; each class of annuities must, however, receive a particular mode of treatment, adapted to, and peculiar to the nature of the circumstances connected with each particular case.

If money could not be employed, and a marketable rate of interest obtained for its use, the value of any sum of money or annuity would be equal to that to be paid at the end of one year, multiplied by the whole period or number of years the annuity has to run; but as compound interest is involved in all these cases, it is clear that if A desires to sell an annuity to B, and which has to last a certain number of years, a certain agreed interest or discount must be allowed to B upon the whole sum to be purchased, and received by him for the fixed period.

**The Increase of the Principal** at compound interest may be illustrated by the following mode of expression :—



Putting  $r$  = interest on £1 for one year or other integral period,

„  $R$  = amount of £1 with one year's interest,

„  $n$  = any integral number of years,

then

$$(1) \quad R^n = (1 + r)^n.$$

Supposing the rate of interest to be 3 per cent., then  $r = .03$  and  $R = 1 + .03 = 1.03$  = the principal of £1, and simple interest on it at the above rate for one year. If improved in a similar manner during the second year, it would amount to  $(1 + .03)^2$  or  $= 1.0609$ , and so on until  $(1 + .03)^{100}$  would amount to 19.2186319809.

In words, the rule may be thus expressed, *Add to unity or 1 the interest due upon it at the end of the first year; involve the sum, to the power whose index is the number representing each successive year in the given period.*

It is manifest that the present value of £1, at 3 per cent., must be such a sum less than £1 as would, if improved by a year's interest, amount to it. Thus the principal of £1, and interest,  $.03$ , thereon  $= £1.03$ , the amount; and  $\frac{1}{1.03} =$

$.9708738$ , the present value of £1. For,  $.9708738 \times 1.03 = £1$ .

Similarly, the present value of £1, due 6 years hence, at 3 per cent., would be  $= \frac{1}{1.194052} = .837484$ . It therefore

follows that if £1 is raised to any amount resulting as shown from its improvement at compound interest, at a certain rate per cent., during any number of years, and unity or 1 is divided by it, the resulting number or quotient will represent the present value of £1, due at the end of the same periods the amounts were raised for. The value or years' purchase of perpetuities may be found by dividing the annuity by the rate of interest on £1 for one year. Thus  $\frac{1}{3} = 33.3333$ ,  $\frac{1}{4} = 25$ ,  $\frac{1}{5} = 20$ ,  $\frac{1}{6} = 16.6667$ , and  $\frac{1}{10} = 10$  years' purchase respectively.

The Present Value of a Perpetuity of £1 payable once in every  $n$ th year, the first payment due  $n$  years hence, will be denoted by  $V_n$ ; thus we have,

$$(2) \quad V_n = \frac{1}{R^n - 1}.$$

And, for the value of such a perpetuity payable every 10 years, at 4 per cent. we have,

$$V_{10} = \frac{1}{R^{10} - 1} = \frac{1}{1.48024 - 1} = 2.0823.$$

The present value of £1 to be paid annually in perpetuity at 4 per cent. is, as stated above, = 25 years' purchase; but if, instead of being annual, the payments are only made at intervals of say 2, 3, or 4 years, or other periods, by taking the amount of  $R^n$  from the Tables for the variable periods, the formula  $V_n = \frac{1}{R^n - 1}$  will of course continually represent the present value of the perpetuity.

If the perpetuity is *deferred* for say 5 years, so that the first payment is to be made 15 years hence, the value found as above must be multiplied by  $v^5$ ; and if the perpetuity is *anticipated* 5 years, the value found must be multiplied by  $R^5$ .

In the former case  $v^5$  being .82192711, we have

$$2.0823 \times .82192711 = 1.71149882;$$

and in the latter case  $R^5$  being 1.21665290, we also have  $2.0823 \times 1.21665290 = 2.53344909$ , the value of the perpetuity.

Again, putting  $s_n$  = redemption fund, we also have

$$(3) \quad \dots \quad V_n = \frac{s_n}{r}.$$

$$\text{Thus } \frac{.083292}{.04} = 2.0823, \text{ as before.}$$

Also, the Present Value of a Perpetuity of £1, deferred  $n$  years, may be deduced as follows:—

Putting  $D$  = deferred value,

„  $v^n$  = value of £1 due  $n$  years hence,

we have

$$(4) \quad \dots \quad D = \frac{v^n}{r}.$$

$$\text{Thus } \frac{.6756}{.04} = 16.8891, \text{ value at 4 per cent. for 10 years.}$$

$$\text{Also } \frac{100}{.04} = 25,$$

and  $.6756 \times 25 = 16.8891$ , the value deferred as before.

When large sums are invested at compound interest, a certain advantage would accrue to an investor if interest on capital were to be paid at several equal intervals during the year, instead of one single payment at the end of the year.

It does not come within the scope of this work to enter into a theoretical investigation of the subject, but the practical mode generally adopted in solving problems of this nature may be exemplified as follows:—

If interest were to be realised  $m$  times in a year, at the rate  $\frac{r}{m}$ , the expression becomes

$$(5) \quad \left(1 + \frac{r}{m}\right)^{mn}.$$

Assuming the principal to be £1, and  $r = \cdot 06$  per £1 for one year, for half-yearly payments we have

$$\left(1 + \frac{\cdot 06}{2}\right)^2 = 1\cdot 0609.$$

Payments being made quarterly, we also have

$$\left(1 + \frac{\cdot 06}{4}\right)^4 = 1\cdot 0613635505.$$

By the same rule, for monthly payments the amount would be 1·06167781, and for weekly payments it would be 1·06179981.

On the same principle, if it were possible for payments to be made momentarily, the amount of all the increments would depend upon, and be expressed by, the well-known principle of the 'Binomial Theorem,' and if the series are continued to a sufficient extent, would = 2·718281828459, which is the base of the *Napierian* logarithms. The log of this number is 0·434294481903, and  $\cdot 06 \times 0\cdot 434294481903 = 0\cdot 02605766891418$ , the natural number of which is 1·061836546557, or the amount.

Thus, it is evident from the nature of the above formula, that if payments were made on the assumption that a year could be divided into an indefinite number of periods, the resulting amount of all the increments, at the end of the year, would, according to this hypothesis, be in excess of that derived from the employment of periods of time having greater duration, as a day, week, or month, &c., &c.

The amount of £1 per Annum, if invested and improved at compound interest, in  $n$  years, may be determined by the following expression:—

Let  $r$  = interest on £1 per annum.

„  $M_n$  = amount of £1 per annum for  $n$  years.

„  $R = (1 + r)$ , as in last case,

then

$$(6) \quad M_n = \frac{R^n - 1}{r}.$$

Assuming the rate of interest to be 3 per cent.,

then

$$M_1 = \frac{R - 1}{\cdot 03} = £1$$

for the first year's amount, and if improved for the second year,

$$\frac{R - 1}{\cdot 03} = \frac{1 \cdot 0609 - 1}{\cdot 03} = 2 \cdot 03;$$

and so on, until

$$\frac{19 \cdot 2186319809 - 1}{\cdot 03} = 607 \cdot 28773269,$$

the amount at the end of 100 years.

In words the rule is thus expressed:—*Deduct unity or 1 from the amount of £1 in  $n$  years, and divide the remainder by the rate per £1.*

The amounts may also be found thus:—Multiply the first year's amount, *i.e.*,  $1 \times 1 \cdot 03 + 1 = 2 \cdot 03$ , the second year's amount; then  $2 \cdot 03 \times 1 \cdot 03 + 1 = 3 \cdot 0909$ , the third year's amount. The same results will be obtained by adding the amount of £1 in  $n$  years, *i.e.*,  $R^n$ , to the amount of £1 per annum in  $n$  years, or  $M_n$ ; thus  $1 + 1 \cdot 03 = 2 \cdot 03$ , then  $2 \cdot 03 + 1 \cdot 0609 = 3 \cdot 0909$ , the third year's amount.

When interest can be realised  $m$  times in a year, the expression becomes

$$(6a) \quad M_n = \frac{\left(1 + \frac{r}{m}\right)^{mn} - 1}{\frac{r}{m}}.$$

Therefore, for half-yearly payments, the interest being at the rate of 4 per cent. per annum, for 10 years, we have

$$M_{10} = \frac{\left(1 + \frac{.04}{2}\right)^{20} - 1}{\frac{.04}{2}} = 12.1486848994.$$

And for quarterly payments we also have

$$M_{10} = \frac{\left(1 + \frac{.04}{4}\right)^{40} - 1}{\frac{.04}{4}} = 12.221593339.$$

The Present Value of £1, due  $n$  years hence, may be determined from the following data:—

Putting  $v^n$  = present value of £1 due  $n$  years hence,

„  $R^n = (1 + r)^n$  as before,

$$(7) \quad \dots \dots \text{then } v^n = \frac{1}{R^n}.$$

Supposing 5 per cent. to be the rate of interest, we have

$$v = \frac{1}{R} = \frac{1}{1.05} = .9523809523,$$

the first year's present value, and the 6th year's present value would be equal to

$$\frac{1}{1.340095641} = .7462153964.$$

In words the rule may be thus expressed:—

*Divide unity or 1 by the amount of £1 in  $n$  years; the quotient will then represent the present value of £1 due at the end of  $n$  years.*

The same results may also be obtained by first dividing unity or 1 by the amount of £1 in one year, and afterwards to constantly divide the successive quotients by the same amount.

$$\text{Thus } \frac{1}{1.05} = .9523809523;$$

$$\text{then } \frac{.9523809523}{1.05} = .9070294784$$

the second year's present value.

If it were possible to realise interest  $m$  times in a year, the expression becomes

$$(7a) \quad v^n = \frac{1}{\left(1 + \frac{r}{m}\right)^{mn}}.$$

Therefore, for half-yearly payments, at 4 per cent., and for 5 years, we have

$$v^5 = \frac{1}{\left(1 + \frac{.04}{2}\right)^{10}} = .8203483,$$

and for quarterly payments we also have

$$v^5 = \frac{1}{\left(1 + \frac{.04}{4}\right)^{20}} = .8195444.$$

**The Redemption Fund** that will amount to £1 in  $n$  years may be computed from the following expression:—

Putting  $s_n$  = redemption fund,

„  $R^n$  and  $r$  = the elements as previously assigned,

then

$$(8) \quad s_n = \frac{r}{R^n - 1}$$

Allowing the rate of interest to be 3 per cent., and to redeem £1 at the end of 3 years, we have

$$s_3 = \frac{.03}{R^3 - 1} = \frac{.03}{1.092727 - 1} = .3235303633,$$

or the redemption fund; and for redemption in 20 years we also have

$$s_{20} = \frac{.03}{1.8061112347 - 1} = .0372157076.$$

The rule for finding the redemption fund may be written in words thus:—

*Divide the rate of interest per £1 by 1 less than the amount of £1 in the time.*

Assuming interest to be convertible  $m$  times in a year, the expression becomes

$$(8a) \quad s_n = \frac{r}{\left(1 + \frac{r}{m}\right)^{mn} - 1}.$$

Therefore, for half-yearly payments, at 4 per cent., and for 10 years, we have

$$s_{10} = \frac{.04}{\left(1 + \frac{.04}{2}\right)^{20} - 1} = \frac{.04}{1.485947396 - 1} = .08231343;$$

and for quarterly payments we also have

$$s_{10} = \frac{.04}{\left(1 + \frac{.04}{4}\right)^{40} - 1} = \frac{.04}{1.4888637336 - 1} = .08182239,$$

the redemption fund.

We may also deduce similar results from

$$(9) \quad . \quad . \quad . \quad s_n = \frac{1}{M_n}.$$

Thus

$$s_n = \frac{1}{12.221593} = .08182239, \text{ the redemption fund, as before.}$$

It may be remarked here, that for very nice work, *i.e.*, to make the simple interest at a certain rate per cent. on the deduced value and redemption fund balance the annuity exactly, it is necessary to employ a table computed to eight or ten places of decimals.

Putting  $A$  = the Immediate Annuity which £1 will purchase, we have

$$(9a) \quad . \quad . \quad . \quad A = s_n + r'.$$

The annuity is therefore readily obtained by adding to the redemption fund necessary to produce £1 at the end of any given period the interest allowed upon the investment.

Thus, the redemption fund necessary to produce £1 at the end of 3 years, at 3 per cent. = .3235303633; then, the interest allowed on the investment being 3 per cent., we have,

$$.3235303633 + .03 = .3535303633,$$

or the annuity. This rule applies to all percentages; for, assuming the interest to be allowed on the outlay to be .20 per £ instead of .03 per £, for a period of 40 years' duration, we have the redemption fund necessary to produce £1 at the end of the assigned period = .01326238; then

$$.01326238 + .20 = .21326238,$$

or the annuity which £1 will purchase.

Table V is therefore well adapted for determining the annuity, without having a special Table for that purpose.

The Present Value of £1 per Annum, deduced by the old rule for  $n$  years, may be computed as follows:—

$$(10) \quad \text{Present value } p_n = \frac{R^n - 1}{R^n r} \text{ or } \frac{1 - v^n}{r}.$$

Assuming the rate of interest to be 3 per cent. per annum for 5 years, we have

$$\frac{1 - .8626087846}{.03} = 4.57970719, \text{ the present value.}$$

The value deduced by either of the last preceding rules is erroneous, when it is necessary to employ rates of interest above those which can be realised in the money market for the redemption of capital. See Table XII for discrepancies in the old table of present values.

The Present Value of £1 per Annum for  $n$  years, allowing to a purchaser of annuities one rate of interest on his purchase-money, and to redeem his capital at the expiration of the time by annually investing the overplus at another practicable rate, may be deduced as follows:—

Putting  $P_n$  = present value,  
 „  $R, s_n$ , and  $r$  = the elements as previously assigned,  
 and  $r'$  = the interest allowed on capital,

we have

$$(11) \quad P_n = \frac{1}{\frac{r}{R^n - 1} + r'} \text{ or } \frac{1}{r' + s}.$$

Assuming the rate of interest on capital to be 5 per cent., and to redeem it at 3 per cent., at the expiration of 3 years, we have

$$\frac{1}{.3235303633 + .05} = \frac{1}{.3735303633} = 2.677158534.$$

Assuming interest to be convertible  $m$  times in a year, the expression becomes

$$(11a) \quad P_n = \frac{1}{\frac{r}{\left(1 + \frac{r}{m}\right)^{mn}} + r'}.$$



Therefore, for half-yearly payments, interest on capital being 10 per cent., and redemption 4 per cent., and for 10 years, we have

$$P_{10} = \frac{1}{\frac{.04}{\left(1 + \frac{.04}{2}\right)^{20} - 1} + .10} = \frac{1}{\frac{.04}{1.485947396 - 1} + .10} = 5.484859137;$$

and for quarterly payments we also have

$$P_{10} = \frac{1}{\frac{.04}{\left(1 + \frac{.04}{4}\right)^{40} - 1} + .10} = \frac{1}{\frac{.04}{1.4888637336 - 1} + .10} = 5.499842456,$$

the present value.

It will be observed that the purchase-money being  $P_n$ , it is evident from  $\frac{1}{r' + s_n} = P_n$ , that the interest  $r'$  allowed or expected to be realised for investing a sum  $P_n$  would be equal to  $P_n$ ,  $r'$ , and  $s_n$ , invested at another rate per cent.,  $r$ , which being accumulated at compound interest, will reproduce the original capital  $P_n$  at the expiration of a certain defined period.

The annuity being unity or £1, is consequently made up of two distinct parts, that is,  $r'$  per cent., a year's interest on  $P_n$ , and  $s_n$ , which being invested at another rate of interest per cent.,  $r$  per annum, will produce  $P_n$ .

The annuity of £1 is therefore equal to  $r' + s_n$ , which may probably be more clearly seen by the following mode of working:—

Putting the period of duration,  $n$ , of the annuity . . . = 55  
years

„ the rate of interest,  $r$ , to reproduce  $P_n$  within  
the period of 55 years . . . . . } = .03  
„ the rate of interest  $r'$  to be realised on the  
purchase-money  $P_n$  . . . . . } = .20,

then from (11) we have

$$P_n = \frac{1}{\frac{r}{R^n - 1} + r'}$$

Also  $R^n = R^{55} = 5.082148592$ ,

$$\text{and } P_{55} = \frac{1}{\frac{.03}{R^{55} - 1} + .20} = \frac{1}{\frac{.03}{5.082148592 - 1} + .20}$$

$$= \frac{1}{.00734907104 + .20} = \frac{1}{.2073497104} = 4.82278505, \text{ or}$$

present value.

To insure, therefore, the purchase of an immediate annuity of £1 under these conditions, the purchaser must pay down a sum of £4.82278505 =  $P_{55}$ , the present value, or years' purchase.

Again,  $s_{55}$  at  $r$  per cent. =  $s_{55}$  at .03 = .00734907104, which is the redemption fund necessary to reproduce £1 in the given time:—

Then  $P_{55}r' = 4.82278505 \times .20 = .9645570100$

And  $P_{55}s_{55} = 4.82278505 \times .00734907104 = .0354429899$

Also  $r' + s_{55}$  = the annuity receivable, or £1.000000000

If, therefore, £.0354429899 is annually invested at the rate of .03 per cent. compound interest, it will reproduce  $P_{55}$ , the original purchase-money, or capital, at the expiration of the term of 55 years.

Thus the amount of £1 per annum for 55 years = 136.0716197, which, multiplied by £.0354429899 = £4.82278505, the original capital, or  $P_{55}$ .

What has been hitherto advanced relates more particularly to formulæ, and rules, employed in the construction of the Tables necessary for determining the present value of immediate and deferred annuities, realised under certain conditions; but when annuities are deferred, and the present value required to be tabulated, special treatment must be adopted; and the construction of Tables of this nature becomes very tedious.

In calculating the Tables in this work of the present value of £1 per annum for  $n$  years after  $t$  years, allowing a purchaser interest on his purchase-money at a certain agreed rate per cent., also such a surplus as, invested at another practicable rate per cent., would reinstate the capital at the end of the term, the following conditions were necessary to be considered.

If instead of an annuity of  $p$  pounds being entered upon immediately, it can only be realised at the end of the  $t$ -th year, and to continue  $n$  years thereafter, the purchaser will expect to realise  $r'$  per cent. on his outlay  $P_{t+n}$ , during the whole term of  $t+n$  years; and here, as was shown in the last preceding case, he can invest the surplus annuity only at the rate of  $r$  per cent.

It is necessary, therefore, to determine the relation existing between  $P_{t+n}$  and  $p$ , and, as it may be seen that no annuity can be paid during the deferred term of  $t$  years,  $P_{t+n}$  would accumulate or amount at the end of the  $t$ -th year to  $P_{t+n}(1+r')^t$ . When, however, the annuity is entered upon, which as a matter of course it would be at the end of the  $t$ -th year, it is, as previously shown, separable into two parts, that is to say, first, a year's interest on the amount which the purchase-money  $P_{t+n}$  has now attained, namely,  $P_{t+n}r'(1+r')^t$ ; and, secondly,  $p - P_{t+n}r'(1+r')^t$ , the sum which must be invested at the rate of  $r$  per cent., and which will reproduce  $P_{t+n}(1+r')^t$  at the end of  $t+n$  years. Then, by condition, we have,

$$\{p - P_{t+n}r'(1+r')^t\}M_n = P_{t+n}(1+r')^t.$$

Solution of this equation gives

$$(12) \quad P_{t+n} = \frac{pM_n}{(1+r')^t(1+r'M_n)}, \text{ and}$$

$$(13) \quad p = \frac{P_{t+n}(1+r')^t(1+r'M_n)}{M_n};$$

in both of which  $M_n$  denotes the amount of an annuity of £1 in  $n$  years.

If in (12)  $p$  be put = 1, we have for the value (the years' purchase), when the annuity is £1,

$$(14) \quad P_{t+n} = \frac{M_n}{(1+r')^t(1+r'M_n)};$$

and if the value, *i.e.*, the sum invested, be £1, we have from (13) by making  $P_{t+n} = 1$ , the annuity which £1 will purchase, *viz.* :—

$$(15) \quad p = \frac{(1+r')^t(1-r'M_n)}{M_n}.$$

The value of an annuity to continue 55 years after 3 years deference,  $r'$  being = .20, and  $r$  = .03, may be deduced from (14).

Thus,

$$P_{3+55} = \frac{M_{55}}{(1 + .20)^3(1 + .20M_{55})}.$$

Table (III) gives  $M_{55} = 136.07161972$ , at 3 per cent. Therefore,

$$P_{3+55} = \frac{136.07161972}{1.728(1 + .20 \times 136.07161972)} = \frac{136.07161972}{48.75435056} =$$

2.7909633636, value of deferment required. Again, if the purchase-money  $P_{t+n}$  is made = £1 for the same continuance and period of deferment, and at the same rates, the annuity £1 will purchase may be deduced from (13) :—

Thus,

$$p = \frac{(1 + .20)^3(1 + .20 M_{55})}{M_{55}};$$

and by substituting the numerical quantities we have

$$p = \frac{1.728(1 + .20 \times 136.07161972)}{136.07161972} = \frac{48.75435056}{136.07161972} =$$

.3582991858, or the annuity deferred which £1 will purchase; and it is, as it ought to be, the reciprocal of the value, when the annuity is £1.

$$\text{For, } p = \frac{1}{P_{t+n}}.$$

thus :—

$$\frac{1}{2.7909633636} = .3582991858,$$

the deferred annuity which £1 will purchase, as before.

The value of the annuity, when deferred, may be readily derived from the value when immediate, by virtue of the following relation,

$$P_{t+n} = P_n v^t,$$

where  $n$  is the term of continuance, and  $t$  the term of deferment. Applying this to the last example, we have,

$$P_{3+55} = P_{55} v^3.$$

$P_{55}$  is = £4·82278505, and  $v^3$  (at ·20 per £1) is = £·57870370. (See Table IV.) Hence,

$P_{3+55} = 4·82278505 \times ·57870370 = 2·790963636$ , the same as before.

In order to illustrate the power of the Tables, and to give an additional method of obtaining the deferred value, we have,

$$(16) \quad P_{t+n} = \frac{\frac{1}{(1+r')^t - 1}}{\frac{1}{P_n} + r' + s_n}.$$

Then, by substitution, we also have,

$$P_{t+n} = \frac{\frac{1}{(1+·20)^3 - 1}}{\frac{1}{4·82278505} + ·20 + ·00734907} = \frac{1}{·3582991937} =$$

2 790963578, or value of deference, practically the same as above.

There is nothing in the amount of work involved in this method to frighten a student—on the contrary, I consider it simpler than when employing  $M_n$ . But for practical purposes, and in order to get over a larger amount of calculation in a given time, no doubt  $P_n v^t$  should be employed, which is the simplest possible form the formula can be made to assume. Tables X and XI were computed by this rule.

Again, for obtaining the deferred annuity which £1 will purchase, we have the following expression:—

$$(17) \quad p = \frac{(1+r')^t - 1}{P_n} + r' + s_n. \quad \text{Or,}$$

$$p = \frac{(1+·20)^3 - 1}{4·822785051} + ·20 + ·00734907 = ·3582991937.$$

It may be here remarked that it is not necessary in practice to work up any of the elements involved in the solution of these problems, as they are tabulated in this work, and may be immediately obtained by reference.

It is to be observed that when working the numerical quantities represented by the formulæ, (14), (15), the operation should be taken from right to left, thus:—

$$M_n \times r' + 1 \times (1+r')^t,$$

i.e.,  $136·07161972 \times ·20 + 1 \times 1·728$ .

If  $t$  is made equal to 0, that is to say, if the annuity can be made available on present entry, then  $(1 + r')^t = 1$ , and the formula deduced becomes for this case

$$(18) \quad P_n = \frac{pM_n}{1 + r'M_n};$$

$$(19) \quad \text{also } p = P_n \frac{(1 + r'M_n)}{M_n}.$$

Putting  $p$  therefore = £1, we have from (18),

$$P_n = \frac{M_n}{1 + r'M_n};$$

and by substituting the numerical quantities we also have

$$P_{ss} = \frac{136.0716197}{1 + (20 \times 136.0716197)} = \frac{136.0716197}{28.21432394} = 4.822785051,$$

which is the present value, or years' purchase immediate.

Again, putting  $P_n = £1$ , we also have from (19),

$$p = \frac{1 + r'M_n}{M_n};$$

and by substitution we also have

$$p = \frac{1 + (20 \times 136.0716197)}{136.0716197} = \frac{28.21432394}{136.0716197} = 207.34907104,$$

which is equal to the redemption fund necessary to produce £1 in the given time, *plus* the interest allowed to a present purchaser. See (9a), page 8.

The results deduced from the last two preceding formulæ for immediate annuities prove the accuracy of the plan upon which the Tables of this class have been computed for this work.

The subject of *Deferred Annuities* has been considered by some to be very complicated, and by many avoided altogether—when two rates of interest are involved—as something unapproachable. The great difference of opinion that exists in relation to the proper mode of treating the question as applied to Mines has led me to investigate it thoroughly, and I believe the conclusions arrived at are such as are not to be controverted.

The resulting number deduced from (14) and (16), that

is to say £2·790963578, is the sum necessary to be paid down by a present purchaser in order to secure an annuity of £1 for 55 years (which is not to commence, however, until the expiration of 3 years), which would yield him 20 per cent. during the entire period of 58 years, and redeem the purchase-money, that is to say £2·790963578, and its amount during the 3 years of deferment, together equal to £4·822785051, by investing the surplus annuity at 3 per cent. compound interest.

Again, under similar conditions, if, instead of £2·790963578, *one pound* only had been invested, then an annuity of £·3582991858 would have been secured by the purchaser. Generally, therefore, in cases of *deferred* annuities of this kind—that is, when two rates of interest are involved—a certain sum,  $P_{t+n}$ , has to be paid down immediately; but as no annuity is or can be payable under the circumstances during the deferred period, the purchase-money,  $P_{t+n}$ , accumulates at the rate allowed to the purchaser on his capital, or  $r'$  per £, to a certain sum  $= P_{t+n} (1 + r')^t = P_n$ ; but, at the expiration of  $t$  years, the deferred period closes, and the annuity commences or is then entered upon, and its payments have to yield interest at the rate agreed upon between the parties to the business, or  $r'$  per £ on the accumulated purchase-money  $P_n = P_{t+n} (1 + r')^t$ , and also a sum sufficient to reinstate the sum  $P_n$  to which the purchase-money has accumulated at the end of the assigned term of  $t+n$  years, at another rate per £, or  $r$ . In the present case the deferred period  $t$  is equal to 3 years, and the term  $n$  to run afterwards is equal to 55 years.

Then,

$$P_{t+n} (1 + r')^t = P_{t+n} (1 + \cdot 20)^3 = P_{t+n} \times 1\cdot728 = £2\cdot790963578 \\ \times 1\cdot728 = £4\cdot822785051 = P_n,$$

the amount to which the purchase-money has accumulated at 20 per cent. at the end of the deferred period.

The interest on  $P_n = P_n r' = 4\cdot822715051 \times \cdot 20 = £\cdot964557010$ , or that part of the annuity due to the agreed percentage.  $P_{t+n}$  being the present gross value to be paid down = £2·790963578, and the redemption fund required to produce £1 at the expiration of 55 years at 3 per cent. is equal to £·007349071.

Then,

$$P_n s_n \text{ at } r \text{ per cent.} = P_n \times \cdot 007349071 = £4'822785051 \\ \times \cdot 007349071 = £0'3544299,$$

the amount necessary to be annually set aside and to accumulate at 3 per cent. for the assigned term of  $n$  years.

Also the interest on  $P_n$ , or  $P_n r'$ , *plus* that on  $P_n s_n$  at  $r$  per cent., is equal to  $P_n \times \cdot 20 =$  to that portion of the annuity enjoyed for present use . . . = 964557010

And  $P_n s_n$  at  $r$  per cent. = the other part set aside for redemption within the period . . . = 035442990

And  $P_n r' + P_n s_n$  at  $r$  per £ . . . = £1'000000000

or the annuity to be received by the purchaser under the proposed conditions.

If further proof of the accuracy of the foregoing mode of working were required, it is only necessary to multiply the amount of an annuity of £1 in 55 years at 3 per cent. by the surplus annuity set aside to reproduce the capital at the expiration of the given time.

Thus, the amount of £1 per annum for  $n$  or 55 years

$$= 136'0716197 \times £0'3544299 = £4'822785051,$$

the original capital invested, with accumulated interest.

When the sum invested is £1, the annuity purchased, as previously shown, is equal to £3582991858, and if treated as above,  $P_{i+n} (1 + r')^i = £1 (1 + \cdot 20)^3 = 1'728 = P_n$ , the accumulated amount during the deferred period of 3 years;

$$\text{Then } 1'728 \times \cdot 20 \quad . \quad . \quad . \quad . \quad = \cdot 3456000$$

$$\text{And } £P_n = £1'728 \times \cdot 0073490 \quad . \quad = \cdot 0126991$$

$$£3582991$$

the annuity as previously determined.

Then, if we multiply the amount of an annuity of £1 as before, we have  $136'07161970 \times \cdot 00734907104 = £1$ , the original capital, or purchase-money paid down.

If further proof of the principle involved in the return of the capital were required, we may select an example embracing a short duration, and proceed in detail as follows:



The present value of £1 per annum, allowing 20 per cent. and to reproduce it at 3 per cent. within a period of 5 years after 3 years = £1'490142634, which accumulates to £2'574966472 in 3 years.

The redemption fund to produce this	
sum is . . . . .	= '485006705689
And £2'574966472 × '20 . . .	= '514993294311
The annuity . . . . .	£1'000000000000

And in detail thus :—

'485006705689	= 1st year's redemption fund.
30'1 inverted.	
<u>'485006705689</u>	
14550201170	
'499556906859	= amount at end of 1st year.
'485006705689	= 2nd year's redemption fund.
<u>'984563612548</u>	
30'1 inverted.	
<u>'984563612548</u>	
29536908376.	
1'014100520924	= amount at end of 2nd year.
'485006705689	= 3rd year's redemption fund.
<u>1'499107226613</u>	
30'1 inverted.	
<u>1'499107226613</u>	
44973216798	
1'544080443411	= amount at end of 3rd year.
'485006705698	= 4th year's redemption fund.
<u>2'029087149100</u>	
30'1 inverted.	
<u>2'029087149100</u>	
60872614473	
2'089959763573	= amount at end of 4th year.
'485006705689	= 5th and last year's redemp. fund.
<u>2'574966469262</u>	= the accumulated present value.

The first year's redemption fund to  
 be invested . . . = £485006706689,  
 And at 3 per cent., at the end of  
 the year becomes . . . = £499546906859.  
 The second instalment of the re-  
 demption fund . . . = £485006705689,  
 Is again invested, and, at the end of  
 the second year the fund is = £1'014100520924,

to which, at the end of the third year, £485006705689 is again added, and so on to the end of the fifth year, when the original purchase-money, £1'490142634, and its accumulation during the deferred period, by multiplying it by

$$(1 + r')^5 = 1.728 = £2.574966470.$$

Care must, however, be taken that no delay is occasioned in investing the annual instalment at the proper time, otherwise a discrepancy will exist in the account at the end of the period.

The Tables introduced into this work have been carefully calculated from data deduced from first principles, and involved in the doctrine of interest and annuities. The formulæ and rules which were employed in their construction are laid down in the most simple form, so as to be readily understood, and applied by those who may not have either time or inclination to investigate, and employ rules containing algebraical combinations of a more complicated nature. I have strenuously endeavoured to divest the subject of all intricate formulæ and elaborate mathematical reasoning, that would, in my opinion, tend in any way to confuse it. I trust, therefore, that this has been effected so far as it was considered to be convenient and beneficial, and consistent with the nature of the inquiry. And it is presumed that any person having occasion for calculations of this nature may, by merely consulting the Tables, obtain at sight any years' purchase for a given time and rate of interest, and consequently arrive at a reliable conclusion as to the value of any annuity in a much more satisfactory manner, in less time, and with greater ease than could be expected to result from a tedious process of direct calculation. The same remark applies to all the other Tables.

Those who are sufficiently expert, and object to the use of tables as labour savers, will find that the rules laid down are suffi-

cient for the calculation of values in a specific and direct manner, or for the production of tables similar to those I have referred to.

Inaccurate tables are worse than useless, and without employing some special means for the correction of error, it certainly could not be expected that tables involving so many figures and direct computations could be entirely free. Considering this, therefore, and being aware from long experience of the trouble and difficulties that are created by the employment of incorrect tables of various kinds, I was led to adopt means to the end in view. I have, therefore, every reason to believe that the result is, Tables free from error, and which may absolutely be relied upon.

With regard to the Tables of Amounts, an additional test as to the accuracy was applied to the final number in the column of each rate per cent. The mode of calculating an extreme number by a logarithmic process in a series having no ratio will be fully illustrated in another portion of the work.

Tables of the value of leases and annuities have frequently been published: that of Mr. Ward was written as far back as 1710; but Mr. Smart's celebrated five Tables of Compound Interest, which appeared in 1726, far excelled all that had been done previously to that time: indeed, his tables have been incorporated more or less into the works of many writers to the present time.

The tables specially referred to are—

1. The amount of £1 in any number of years.
2. The present value of £1 due at the end of any number of years.
3. The amount of £1 per annum for any number of years.
4. The present value of £1 per annum for any number of years.
5. The annuity which £1 will purchase for any number of years.

None of the tables of this class that I have seen (and I have examined a large number of works upon the subject), are computed to rates of interest higher than 10 per cent., and many of them extend only to 5 per cent.

The *fourth* and *fifth* tables, previously described, must necessarily be inaccurate for rates of interest higher than

from  $4\frac{1}{2}$  to 5 per cent. This will be fully demonstrated further on.

Tables I, II, and III of the Amounts in this work were originally calculated to 15 decimal places, with a view to print them to 10 places; but on account of the great expense of publishing, I determined to reduce all the other Tables to their present condition. The ordinary table of the present value of £1 per annum is the same in the works of all writers upon annuities; and, as the basis upon which it has been computed is in error, it follows that the annuity which £1 will purchase is also in error, because the latter is dependent for its formation upon the former. That is,  $p_n$  being the present value, and  $A$  = the annuity £1 will purchase, we have  $A = \frac{1}{p_n}$ . Thus for 60 years at 10 per cent., in the old table,

$p_n = 9.967157$ ; and  $\frac{1}{9.967157} = .1003295122$ , or the annuity.

For the same period of time, and rate per cent., but redeeming capital at the rate of 3 per cent.,  $P_n = 9.42214381$ . Also, we have  $A = \frac{1}{P_n} = \frac{1}{9.42214381} = .1061329587$ , or the annuity.

Thus it is evident that the years' purchase upon the old basis is in excess of the truth, whilst the annuity which £1 will purchase, derived from it, is in defect.

The reverse is the case in the Tables calculated for this work. For  $9.967156 - 9.42214381 = .54504319$ , the difference in excess of a year's purchase; and  $.1061329587 - .1003295122 = .0057034465$ , the difference in defect.

The rate of interest allowed to a purchaser of mineral property, such as Collieries, Iron Mines, and others, frequently ranges between 10 and 25 per cent., but more generally between 14 and 20 per cent., depending of course upon the character of the property. It is evident, therefore, that tables calculated for rates of interest no higher than 8 or 10 per cent., and to 2 or 3 places of decimals, could not be employed for ascertaining the true value of annuities derived, or to be derived, from high rates.

It is stated on page 2 of all the editions of 'Inwood's Tables of Annuities' that I have seen—that is to say, those published

from 1837 to 1866—that 'A lease or annuity for 14 years, to make 3 per cent. and get back the principal, is worth 11·296 years' purchase of the clear annual rent,' and this rule is repeated as a footnote as far as page 9, as being true for all the rates of interest up to 10 per cent. The table goes no higher than 10 per cent., but it is identical with Mr. Smart's table—and that of all subsequent writers—of the present value of £1 per annum, for any number of years. This table, and others of its kind, to be found in most works on Annuities, is constructed correctly according to the mode laid down; but as that mode is based on incorrect principles, its application to the valuation of annuities, where interest is allowed at higher rates per cent. than can possibly be found for reproducing capital, is entirely fallacious, for the principle upon which it is based assumes that we can reproduce capital which may have been invested, at the same rate of interest as that allowed and expected to be realised on the purchase-money invested.

Taking 3 per cent. as interest to be realised on capital invested, and redeeming that capital at the same rate within 14 years, we have the redemption fund to reproduce the capital at 3 per cent. within 14 years = 0·5852634.

$$\text{Then } 0\cdot5852634 + 0\cdot3 = 0\cdot8852634 \text{ and } \frac{1}{0\cdot8852634}$$

= 11·29607314 years' purchase, practically the same as in Inwood, and in all other writers on Annuities, but correct to more places of decimals.

Now, assuming a purchase was effected by allowing 20 per cent. instead of 3 per cent., and by the same rule also to recoup at 20 per cent., we have the redemption fund to recoup at 20 per cent. within 14 years = 0·168930552.

$$\text{Then } 0\cdot168930552 + 0\cdot20 = 0\cdot2168930552 \text{ and } \frac{1}{0\cdot2168930552} \\ = 4\cdot610567171 \text{ years' purchase.}$$

Suppose the annuity to be purchased equals £20,000, its present value, immediate, would be £4·610567171 × 20,000 = £92211·34342.

$$\text{Then 20 per cent. upon this sum} = 18442\cdot268684$$

$$\text{And } £92211\cdot34342 \times 0\cdot168930552 = 1557\cdot731316$$

$$\text{The annuity} \quad . \quad . \quad £20,000\cdot000000$$

It is, therefore, evident that if a purchaser were to invest £92211·34342 in purchasing an annuity of £20,000, derived from some mineral property, he could not invest annually in any funds so small a sum as £1557·731315 for 14 years, that would yield him 20 per cent. It would, therefore, be impossible to realise or reproduce the original capital invested, within the time, under the circumstances.

Now, if we apply the proper rule, which is founded upon the principle that an investor realises a certain rate on his capital, and can reproduce that capital at another, but lower, and more practicable rate, we shall find that a serious discrepancy exists in the last preceding mode of ascertaining the value.

Taking 20 per cent. as interest to be realised on capital, and to redeem that capital within 14 years at 3 per cent. compound interest, we have the redemption fund necessary to replace £1 within the time = ·058526339.

Then ·058526339 + ·20 = ·258526339,

and  $\frac{1}{\cdot258526339} = 3\cdot868077828$  years' purchase,

which is the true sum that must be given in order to secure £1 annuity for 14 years, allowing 20 per cent. upon it, and to replace it at 3 per cent. within the time.

To secure an annuity, therefore, of £20,000, there must be invested a sum equal to £77361·55656; and to get it back in 14 years at 3 per cent. an annual redemption fund of £4527·6887446 would be required to be set aside to accumulate at compound interest.

For 20 per cent. on £77361·55656 = 15472·31131

And £77361·55656 × ·058526339 = 4527·68869

The annuity as before = £20000·00000

The present value obtained by Inwood's rule,  
and endorsed by many others (see pages  
2 to 9 of his book)

= 92211·34342

The present value found by correct method,  
viz. to realise at one rate per cent., and to  
redeem at another rate, say 3 per cent.

= 77361·55626

Difference = £14849·78716

It is conclusive, therefore, that a present purchaser would be paying too much by £742489358, in order to secure £1 annuity, or a total of £1484978716.

For the difference between the incorrect and the true years' purchase

$$= £4'610567171 - 3'868077813 = £'742489358,$$

$$\text{and } £742489358 \times 20000 = £1484978716,$$

being the difference in error as before, or a loss of 74'2489 per cent. on the annuity purchased. (See Table XII.)

The practice, therefore, of valuing upon tables constructed on the assumption of reproducing capital at the same high rate of interest as that which may be realised on it is opposed to the truth, and calculated to mislead and injure a purchaser to a very large extent.

Thoman's definition is '*that the present value of a deferred annuity is equal to the difference between two immediate annuities of the same yearly income, one for the whole term, the other to continue until the time of entering on the deferred annuity.*'

This rule, however, embraces but one rate of interest in the present value of £1 per annum, but it has, I believe, been followed by all writers on Annuities, and by many valuers since Thoman's time. It is thus illustrated:—

Assuming the annuity to be deferred  $t$  years, and to continue  $n$  years afterwards, that is, say 55 years after 3 years, we have

The present value of  $3 + 55 = 58$  years

at 3 per cent. . . . . = 27'33100549

The present value of  $58 - 55 = 3$  years

at 3 per cent. . . . . = 2'82861138

Present value deferred 3 years = £24'50239411

Now if we suppose the interest allowed on an investment is 20 per cent, and also to reproduce the capital at the same rate, employing the above rule, we have for a duration of 14 years after 3 years:

The present value of 3 + 14 = 17 years at	
20 per cent. . . . .	= 4·7746338
The present value of 17 - 14 = 3 years at	
20 per cent. . . . .	= 2·1064815
Present value deferred 3 years . . . . .	= £2·6681523

But allowing a purchaser 20 per cent. upon his investment, and to reproduce the capital at 3 per cent., for a similar period, that is to say 14 years after 3 years, we have from (14),

$$P_{3+14} = \frac{M_{14}}{(1 + r')^3(1 + r'M_{14})}$$

Or,

$$\frac{17·08632416}{1·728 \times (1 + .20 \times 17·08632416)} = \frac{17·08632416}{7·63303363} = 2·238470965$$

years' purchase, or value deferred three years.

The deferred value by Thoman's or Inwood's rule = 2·668152300

The deferred value by correct method . . . = 2·238470965

Difference = £·429681335

A purchaser would, therefore, be paying too much for each £1 annuity, by £·429681335, or 8s. 7d.; and if an annuity of £20,000 were purchased, the gross overpaid sum would amount to £8593·6267, or £8593 12s. 6½d., or a total loss of 42·968 per cent. upon the annuity.

$$\text{For } 2·668152300 \times 20000 = 53363·0460$$

$$\text{And } 2·238470965 \times 20000 = 44769·4193$$

$$\text{Difference as before} = £8593·6267$$

Again, taking another case under Thoman's and Inwood's rule, as generally adopted, and allowing 20 per cent. to a present purchaser, and to reproduce the capital at the same rate, we have for a duration of 55 years after 3 years:

The present value of £1 per annum for  
58 years at 20 per cent. . . . . = 4·999872221

The present value of £1 per annum for  
3 years at 20 per cent. . . . . = 2·106481481

Present value deferred 3 years = £2·893390740



But, by allowing to the said purchaser 20 per cent. upon his investment, and to reproduce the capital at 3 per cent., the period of time being as in the last preceding case, or 55 years after 3 years, and adopting the correct rule for such a case, we have

$$\frac{136.07161972}{1.728 \times (1 + .20 \times 136.07161972)} = \frac{136.07161972}{48.75435056} = 2.790963639,$$

the correct value deferred.

The deferred value by Thoman's or Inwood's

rule . . . . . = 2.893390740

The deferred value by correct method . . . = 2.790963639

Difference = £.102427101

The difference, therefore, is equivalent to 2s. 0½d. per £1, and, if as before, an annuity of £20,000 were purchased, the overpaid value or total loss would = £.102427101 × 20000 = £2048.54202; that is to say, every £1 annuity purchased under such conditions would cost too much by £.102427101, or 10.243 per cent.

It will be observed that throughout the problems where the condition was introduced that a certain sum was necessary to be expended upon open or unopened mines, with a view to obtain an estimated yield of minerals, and constant profit extending over a definite future period, the ordinary or customary mode of allowing 5 per cent. upon any such sum has been followed. It was considered advisable that this mode of solution should be fully exhibited, as it is believed to be good practice by some of the profession.

Others, however, entertain an opposite opinion, the nature of which will be best understood by putting a case. For this purpose, therefore, let us assume that a colliery is yielding a net income of £8,000 per annum, and that after careful consideration a valuer has estimated that to place the colliery in a position to yield a constant quantity of minerals extending over a period of 21 years, so that in all probability the income will be uniform for that period, the sum of £12,000 must be ex-

pended upon the works, during a period of 3 years, in equal sums of £4,000 each year. The interest to be allowed to a purchaser is 20 per cent. per annum, and the capital is to be redeemed at 3 per cent. per annum.

Under such conditions the present value  
of the colliery would be . . . = £34,061.13800

The redemption fund to replace this gross value of £34,061.1380 . . . = 1,187.77239

And interest on the gross value of  
 $£34,061.1380 \times 20 \text{ per cent. per annum} = 6,812.22761$

**The proposed annuity . . . = £8,000.00000**

Then, it is customary to say,

From the gross value of the colliery . = 34,061·1380

Must be deducted the estimated  
cost of works . . . = £12,000

And also interest thereon at  
the rate of 5 per cent. for  
3 years . . . . . = 1,800

\_\_\_\_\_ = 13,800.0000

**Net present value of the colliery**                = £20,261·1380

Now, it is held that the gross value of the colliery is made up of two parts, *i.e.*, £22,061·1380 and £12,000; because these two sums together = £34,061·1380, or the gross value; also, that the purchaser, or party in possession, is receiving 20 per cent. per annum upon £22,061·1380, and upon £12,000, the latter sum being contained in and part of the gross value. Further, that the vendor receives a less sum for the colliery than the gross value, by the difference between that value and £12,000, or £20,261·1380; and, therefore, that the purchaser is not entitled to be allowed 5 per cent. for 3 years upon £12,000, nor indeed the full sum of £12,000, but only such a sum as would, if it were invested at 3 per cent., accumulate to £12,000 at the end of 3 years. According to this view, by Table (XIII), the present value of £4,000 per annum for 3 years, allowing interest at 3 per cent. per annum = £11,314·445.

The present value of the colliery, as previously stated . . . . .	= £34,061·1380
From which must be deducted the present value of £4,000 per annum for 3 years at 3 per cent. per annum . . . . .	= <u>11,314·4450</u>
Present net value of the colliery according to the new mode . . . . .	= £22,746·6930
Present net value of the colliery first deduced . . . . .	= <u>20,261·1380</u>
Difference in value . . . . .	= <u>£2,485·5550</u>

The difference between the values as found by the two modes is not large, but it is apparent that if the time over which the expenditure was distributed amounted to 8 or 10 years, the difference would be very considerable.

The preceding problem, representing a particular case in the valuation of mines, occurring at pp. 119, 120, and 121 of the first edition, has been referred to and discussed by the late Mr. Peter Gray at pp. xxi to xxiii in his 'Introductory Note,' and it is considered of sufficient importance to be retained in this edition.

## TABLE I.



TABLE I.

Amount of £1 in n years at the following rates per cent.

Years	½ per cent.	Years	½ per cent.	Years	½ per cent.	Years	½ per cent.
1	1'005	51	1'2896419440	1	1'0075	51	1'4638541068
2	1'010025	52	1'2960901537	2	1'01505625	52	1'4748330126
3	1'015075125	53	1'3025706045	3	1'0226691719	53	1'4858942602
4	1'0201505006	54	1'3090834575	4	1'0303391907	54	1'4970384672
5	1'0252512531	55	1'3156288748	5	1'0380667346	55	1'5082662557
6	1'0303775094	56	1'3222070192	6	1'0458522351	56	1'5195782526
7	1'0355293969	57	1'3288180543	7	1'0536961269	57	1'5309750895
8	1'0407070439	58	1'3354621446	8	1'0615988478	58	1'5424574022
9	1'0459105791	59	1'3421394553	9	1'0695608392	59	1'5540258332
10	1'0511401320	60	1'3488501526	10	1'0775825455	60	1'5656810269
11	1'0563958327	61	1'3555944033	11	1'0856644146	61	1'5774236346
12	1'0616778129	62	1'3623723753	12	1'0938068977	62	1'5892543119
13	1'0669862009	63	1'3691842372	13	1'1020104494	63	1'6011737192
14	1'0723211319	64	1'3760301584	14	1'1102755278	64	1'6131825221
15	1'0776827376	65	1'3829103092	15	1'1186025942	65	1'6252813911
16	1'0830711513	66	1'3898248607	16	1'1269921137	66	1'6374710015
17	1'0884865070	67	1'3967739850	17	1'1354445545	67	1'6497520340
18	1'0939289396	68	1'4037578550	18	1'1439603887	68	1'6621251743
19	1'0993985843	69	1'4107766442	19	1'1525400916	69	1'6745911131
20	1'1048955772	70	1'4178305275	20	1'1611841423	70	1'6871505464
21	1'1104200551	71	1'4249196801	21	1'1698930234	71	1'6998041755
22	1'1159721553	72	1'4320442785	22	1'1786672210	72	1'7125527068
23	1'1215520161	73	1'4392044999	23	1'1875072252	73	1'7253968521
24	1'1271597762	74	1'4464005224	24	1'1964135294	74	1'7383373285
25	1'1327955751	75	1'4536325250	25	1'2053866309	75	1'7513748585
26	1'1384595530	76	1'4609006876	26	1'2144270306	76	1'7645101699
27	1'1441518507	77	1'4682051911	27	1'2235352333	77	1'7777439962
28	1'1498726100	78	1'4755462170	28	1'2327117476	78	1'7910770762
29	1'1556219730	79	1'4829239481	29	1'2419570857	79	1'8045101542
30	1'1614000829	80	1'4903385678	30	1'2512717638	80	1'8180439804
31	1'1672070833	81	1'4977902607	31	1'2606563021	81	1'8316793102
32	1'1730431187	82	1'5052792120	32	1'2701112243	82	1'8454169051
33	1'1789083343	83	1'5128056080	33	1'2796370585	83	1'8592575319
34	1'1848028760	84	1'5203696361	34	1'2892343364	84	1'8732019633
35	1'1907268904	85	1'5279714843	35	1'2989035940	85	1'8872509781
36	1'1966805248	86	1'5356113417	36	1'3086453709	86	1'9014053604
37	1'2026639275	87	1'5432893984	37	1'3184602112	87	1'9156659006
38	1'2086772471	88	1'5510058454	38	1'3283486628	88	1'9300333949
39	1'2147206333	89	1'5587608746	39	1'3383112778	89	1'9445086453
40	1'2207942365	90	1'5665546790	40	1'3483486123	90	1'9590924602
41	1'2268982077	91	1'5743874524	41	1'3584612269	91	1'9737856536
42	1'2330326987	92	1'5822593896	42	1'3686496861	92	1'9885809460
43	1'2391978622	93	1'5901706866	43	1'3789145588	93	2'0035034639
44	1'2453938515	94	1'5981215400	44	1'3892564180	94	2'0185297398
45	1'2516208208	95	1'6061121477	45	1'3996758411	95	2'0336687129
46	1'2578789249	96	1'6141427085	46	1'4101734099	96	2'0489212282
47	1'2641683195	97	1'6222134220	47	1'4207497105	97	2'0642881375
48	1'2704891611	98	1'6303244891	48	1'4314053333	98	2'0797702985
49	1'2768416069	99	1'6384761116	49	1'4421408733	99	2'0953685751
50	1'2832258149	100	1'6466684921	50	1'4529569299	100	2'1110858400

Amount of £1 in n years at the following rates per cent.

Years	1 per cent.	Years	1 per cent.	Years	1½ per cent.	Years	1½ per cent.
1	1'01	51	1'6610781401	1	1'0125	51	1'8842851532
2	1'0201	52	1'6776889215	2	1'02515625	52	1'9078387177
3	1'030301	53	1'6944658107	3	1'0379707031	53	1'9316867016
4	1'04060401	54	1'7114104688	4	1'0509453369	54	1'9558327854
5	1'0510100501	55	1'7285245735	5	1'0640821536	55	1'9802806952
6	1'0615201506	56	1'7458098192	6	1'0773831805	56	2'0050342039
7	1'0721353321	57	1'7632679174	7	1'0908504703	57	2'0300971315
8	1'0828567056	58	1'7809005966	8	1'1044861012	58	2'0554733456
9	1'0936852727	59	1'7987096025	9	1'1182921774	59	2'0811667624
10	1'1046221254	60	1'8166966986	10	1'1322708297	60	2'1071813470
11	1'1156683467	61	1'8348636655	11	1'1464242150	61	2'1335211138
12	1'1268250301	62	1'8532123022	12	1'1607545177	62	2'1601901277
13	1'1380932804	63	1'8717444252	13	1'1752639492	63	2'1871925043
14	1'1494742132	64	1'8904618695	14	1'1899547486	64	2'2145324106
15	1'1609689554	65	1'9093664882	15	1'2048291829	65	2'2422140657
16	1'1725786449	66	1'9284601531	16	1'2198895477	66	2'2702417416
17	1'1843044314	67	1'9477447546	17	1'2351381670	67	2'2986197633
18	1'1961474757	68	1'9672222021	18	1'2505773941	68	2'3273525104
19	1'2081089504	69	1'9868944242	19	1'2662096116	69	2'3564444168
20	1'2201900399	70	2'0067633684	20	1'2820372317	70	2'3858999720
21	1'2323919403	71	2'0268310021	21	1'2980626971	71	2'4157237216
22	1'2447158597	72	2'0470993121	22	1'3142884808	72	2'4459202681
23	1'2571630183	73	2'0675703052	23	1'3307170868	73	2'4764942715
24	1'2697346485	74	2'0882460083	24	1'3473510504	74	2'5074504499
25	1'2824319950	75	2'1091284684	25	1'3641929385	75	2'5387935805
26	1'2952563150	76	2'1302197530	26	1'3812453503	76	2'5705285003
27	1'3082088781	77	2'1515219506	27	1'3985109172	77	2'6026601065
28	1'3212909669	78	2'1730371701	28	1'4159923036	78	2'6351933578
29	1'3345038766	79	2'1947675418	29	1'4336922074	79	2'6681332748
30	1'3478489153	80	2'2167152172	30	1'4516133600	80	2'7014849408
31	1'3613274045	81	2'2388823694	31	1'4697585270	81	2'7352535025
32	1'3749406785	82	2'2612711931	32	1'4881305086	82	2'7694441713
33	1'3886900853	83	2'2838839050	33	1'5067321400	83	2'8040622234
34	1'4025769862	84	2'3067227440	34	1'5255662917	84	2'8391130012
35	1'4166027560	85	2'3297899715	35	1'5446358703	85	2'8746019137
36	1'4307687836	86	2'3530878712	36	1'5639438187	86	2'9105344377
37	1'4450764714	87	2'3766187499	37	1'5834931165	87	2'9469161181
38	1'4595272361	88	2'4003849374	38	1'6032867804	88	2'9837525696
39	1'4741225085	89	2'4243887868	39	1'6233278652	89	3'0210494767
40	1'4888637336	90	2'4486326746	40	1'6436194635	90	3'0588125952
41	1'5037523709	91	2'4731190014	41	1'6641647068	91	3'0970477526
42	1'5187898946	92	2'4978501914	42	1'6849667656	92	3'1357608495
43	1'5339777936	93	2'5228286933	43	1'7060288502	93	3'1749578602
44	1'5493175715	94	2'5480569803	44	1'7273542108	94	3'2146448334
45	1'5648107472	95	2'5735375501	45	1'7489461384	95	3'2548278938
46	1'5804588547	96	2'5992729256	46	1'7708079652	96	3'2955132425
47	1'5962634432	97	2'6252656548	47	1'7929430647	97	3'3367071580
48	1'6122260777	98	2'6515183114	48	1'8153548531	98	3'3784159975
49	1'6283483385	99	2'6780334945	49	1'8380467887	99	3'4206461975
50	1'6446318218	100	2'7048138294	50	1'8610223736	100	3'4634042749

TABLE I.

Amount of £1 in *n* years at the following rates per cent.

Years	1½ per cent.	Years	1½ per cent.	Years	1½ per cent.	Years	1½ per cent.
1	1'015	51	2'1368210569	1	1'0175	51	2'4224527382
2	1'030225	52	2'1688733728	2	1'03530625	52	2'4648456611
3	1'045678375	53	2'2014064734	3	1'0534241094	53	2'5079804602
4	1'0613635506	54	2'2344275705	4	1'0718590313	54	2'5518701182
5	1'0772840039	55	2'2679439840	5	1'0906165643	55	2'5965278453
6	1'0934432639	56	2'3019631438	6	1'1097023542	56	2'6419670826
7	1'1098449129	57	2'3364925909	7	1'1291221454	57	2'6882015065
8	1'1264925866	58	2'3715399798	8	1'1488817830	58	2'7352450329
9	1'1433899754	59	2'4071130795	9	1'1689872142	59	2'7831118210
10	1'1605408250	60	2'4432197757	10	1'1894444904	60	2'8318162778
11	1'1779489374	61	2'4798680723	11	1'2102597690	61	2'8813730627
12	1'1956181715	62	2'5170660934	12	1'2314393149	62	2'9317970913
13	1'2135524440	63	2'5548220848	13	1'2529895030	63	2'9831035404
14	1'2317557307	64	2'5931444161	14	1'2749168193	64	3'0353078523
15	1'2502320667	65	2'6320415823	15	1'2972278636	65	3'0884257398
16	1'2689855477	66	2'6715222061	16	1'3199293512	66	3'1424731902
17	1'2880203309	67	2'7115950391	17	1'3430281149	67	3'1974664710
18	1'3073406358	68	2'7522689647	18	1'3665311069	68	3'2534221343
19	1'3269507454	69	2'7935529992	19	1'3904454012	69	3'3103570216
20	1'3468550065	70	2'8354562942	20	1'4147781958	70	3'3682882695
21	1'3670578316	71	2'8779881386	21	1'4395368142	71	3'4272333142
22	1'3875636991	72	2'9211579607	22	1'4647287084	72	3'4872098972
23	1'4083771546	73	2'9649753301	23	1'4903614608	73	3'5482360704
24	1'4295028119	74	3'0094499600	24	1'5164427864	74	3'6103302017
25	1'4509453541	75	3'0545917094	25	1'5429805352	75	3'6735109802
26	1'4727095344	76	3'1004105851	26	1'5699826945	76	3'7377974822
27	1'4948001774	77	3'1469167439	27	1'5974573917	77	3'8032088772
28	1'5172221801	78	3'1941204950	28	1'6254128960	78	3'8697650326
29	1'5399805128	79	3'2420323025	29	1'6538576217	79	3'9374859206
30	1'5630802205	80	3'2906627870	30	1'6828001301	80	4'0063919243
31	1'5865264238	81	3'3400227288	31	1'7122491324	81	4'0765037829
32	1'6103243202	82	3'3901230697	32	1'7422134922	82	4'1478425991
33	1'6344791850	83	3'4409749158	33	1'7727022283	83	4'2204298446
34	1'6589963727	84	3'4925895395	34	1'8037245173	84	4'2942873369
35	1'6838813183	85	3'5449783826	35	1'8352896963	85	4'3694373958
36	1'7091395381	86	3'5981530583	36	1'8674072660	86	4'4459025503
37	1'7347766312	87	3'6521253542	37	1'9000868932	87	4'5237058449
38	1'7607982806	88	3'7069072345	38	1'9333384138	88	4'6028706972
39	1'7872102548	89	3'7625108430	39	1'9671718361	89	4'6834209344
40	1'8140184087	90	3'8189485057	40	2'0015973432	90	4'7653308007
41	1'8412286848	91	3'8762327333	41	2'0366252967	91	4'8487749647
42	1'8688471151	92	3'9343762243	42	2'0722662394	92	4'9336285266
43	1'8968798218	93	3'9933918676	43	2'1085308986	93	5'0199670258
44	1'9253330191	94	4'0532927457	44	2'1454301893	94	5'1078164488
45	1'9542130144	95	4'1140921368	45	2'1829752176	95	5'1972032366
46	1'9835262096	96	4'1758035189	46	2'2211772839	96	5'2881542933
47	2'0132791028	97	4'2384405717	47	2'2600478864	97	5'3806069934
48	2'0434782893	98	4'3020171803	48	2'2995987244	98	5'4748591908
49	2'0741304637	99	4'3665474380	49	2'3398417021	99	5'5706692266
50	2'1052424206	100	4'4320456495	50	2'3807889319	100	5'6681559381



Amount of £1 in *n* years at the following rates per cent.

Years	2 per cent.	Years	2 per cent.	Years	2½ per cent.	Years	2½ per cent.
1	1·02	51	2·7454197897	1	1·0225	51	3·1104924437
2	1·0404	52	2·8003281855	2	1·04550625	52	3·1804785237
3	1·061208	53	2·8563347492	3	1·0690301406	53	3·2520392904
4	1·08243216	54	2·9134614441	4	1·0930833188	54	3·3252101745
5	1·1040808032	55	2·9717306730	5	1·1176776935	55	3·4000274034
6	1·1261624193	56	3·0311652865	6	1·1428254416	56	3·4765280200
7	1·1486856676	57	3·0917885922	7	1·1685390140	57	3·5547499004
8	1·1716593810	58	3·1536243641	8	1·1948311418	58	3·6347317732
9	1·1950925686	59	3·2166968513	9	1·2217148425	59	3·7165132381
10	1·2189944200	60	3·2810307884	10	1·2492034265	60	3·8001347859
11	1·2433743084	61	3·3466514041	11	1·2773105036	61	3·8856378186
12	1·2682417946	62	3·4135844322	12	1·3060499899	62	3·9730646695
13	1·2936066305	63	3·4818561209	13	1·3354361147	63	4·0624586246
14	1·3194787631	64	3·5514932433	14	1·3654834272	64	4·1538639437
15	1·3458683383	65	3·6225231081	15	1·3962068044	65	4·2473258824
16	1·3727857051	66	3·6949735703	16	1·4276214575	66	4·3428907148
17	1·4002414192	67	3·7688730417	17	1·4597429402	67	4·4406057558
18	1·4282462476	68	3·8442505025	18	1·4925871564	68	4·5405193853
19	1·4568111725	69	3·9211355126	19	1·5261703674	69	4·6426810715
20	1·4859473960	70	3·9995582229	20	1·5605092007	70	4·7471413956
21	1·5156663439	71	4·0795493873	21	1·5956206577	71	4·8539520770
22	1·5459796708	72	4·1611403751	22	1·6315221225	72	4·9631659988
23	1·5768992642	73	4·2443631826	23	1·6682313703	73	5·0748372337
24	1·6084372495	74	4·3292504462	24	1·7057665761	74	5·1890210715
25	1·6406059945	75	4·4158354551	25	1·7441463240	75	5·3057740456
26	1·6734181144	76	4·5041521642	26	1·7833896163	76	5·4251539616
27	1·7068864766	77	4·5942352075	27	1·8235158827	77	5·5472199258
28	1·7410242062	78	4·6861199117	28	1·8645449901	78	5·6720323741
29	1·7758446903	79	4·7798423099	29	1·9064972523	79	5·7996531025
30	1·8113615841	80	4·8754391561	30	1·9493934405	80	5·9301452973
31	1·8475888158	81	4·9729479392	31	1·9932547929	81	6·0635735665
32	1·8845405921	82	5·0724068980	32	2·0381030258	82	6·2000399717
33	1·9222314039	83	5·1738550360	33	2·0839603439	83	6·3395040611
34	1·9606760320	84	5·2773321367	34	2·1308494516	84	6·4821429025
35	1·9998895527	85	5·3828787794	35	2·1787935642	85	6·6279911178
36	2·0398873437	86	5·4905363550	36	2·2278164194	86	6·7771209178
37	2·0806850906	87	5·6003470821	37	2·2779422889	87	6·9296061386
38	2·1222987924	88	5·7123540237	38	2·3291959904	88	7·0855222767
39	2·1647447683	89	5·8266011042	39	2·3816029002	89	7·2449465279
40	2·2080396636	90	5·9431331263	40	2·4351889654	90	7·4079578248
41	2·2522004569	91	6·0619957888	41	2·4899807171	91	7·5746368759
42	2·2972444660	92	6·1832357046	42	2·5460052833	92	7·7450662056
43	2·3431893553	93	6·3069004187	43	2·6032904022	93	7·9193301952
44	2·3900531425	94	6·4330384271	44	2·6618644362	94	8·0975151246
45	2·4378542053	95	6·5616991956	45	2·7217563860	95	8·2797092149
46	2·4866112894	96	6·6929331795	46	2·7829959047	96	8·4660026722
47	2·5363435152	97	6·8267918431	47	2·84561133126	97	8·6564877324
48	2·5870703855	98	6·9633276800	48	2·9096396121	98	8·8512587063
49	2·6388117932	99	7·1025942336	49	2·9751065934	99	9·0504120272
50	2·6915880291	100	7·2446461183	50	3·0420463997	100	9·2540462979

TABLE I.

85

Amount of £1 in  $n$  years at the following rates per cent.

Years	2½ per cent.	Years	2½ per cent.	Years	2½ per cent.	Years	2½ per cent.
1	1·025	51	3·5230364377	1	1·0275	51	3·9890856203
2	1·050625	52	3·6111123486	2	1·05575625	52	4·0987854749
3	1·076890625	53	3·7013901574	3	1·0847895469	53	4·2115020754
4	1·1038128906	54	3·7939249113	4	1·1146212594	54	4·3273183825
5	1·1314082129	55	3·8887730341	5	1·1452733440	55	4·4463196380
6	1·1596934182	56	3·9859923599	6	1·1767683610	56	4·5685934281
7	1·1886857537	57	4·0856421689	7	1·2091294909	57	4·6942297474
8	1·2184028975	58	4·1877832231	8	1·2423805519	58	4·8233210654
9	1·2488629699	59	4·2924778037	9	1·2765460171	59	4·9559623947
10	1·2800845442	60	4·3997897488	10	1·3116510326	60	5·0922513606
11	1·3120866578	61	4·5097844925	11	1·3477214360	61	5·2322882730
12	1·3448888242	62	4·6225291048	12	1·3847837755	62	5·3761762005
13	1·3785110449	63	4·7380923325	13	1·4228653293	63	5·5240210460
14	1·4129738210	64	4·8565446408	14	1·4619941259	64	5·6759316248
15	1·4482981665	65	4·9779582568	15	1·5021989643	65	5·8320197444
16	1·4845056207	66	5·1024072132	16	1·5435904358	66	5·9924002874
17	1·5216182612	67	5·2299673936	17	1·5859559453	67	6·1571912953
18	1·5596587177	68	5·3607165784	18	1·6295697338	68	6·3265140559
19	1·5986501856	69	5·4947344929	19	1·6743829015	69	6·5004931925
20	1·6386164403	70	5·6321028552	20	1·7204284313	70	6·6792567553
21	1·6795818513	71	5·7729054266	21	1·7677402131	71	6·8629363160
22	1·7215713976	72	5·9172280622	22	1·81633530690	72	7·0516670647
23	1·7646106825	73	6·0651587638	23	1·8663027784	73	7·2455879090
24	1·8087259496	74	6·2167877329	24	1·9176261048	74	7·4448415765
25	1·8539440983	75	6·3722074262	25	1·9703608227	75	7·6495747199
26	1·9002927008	76	6·5315126118	26	2·0245457453	76	7·8599380247
27	1·9478000183	77	6·6948004271	27	2·0802207533	77	8·0760863203
28	1·9964950188	78	6·8621704378	28	2·1374268240	78	8·2981786942
29	2·0464073942	79	7·0332246988	29	2·1962060617	79	8·5263786082
30	2·0975675791	80	7·2095678162	30	2·2566017284	80	8·7608540200
31	2·1500067686	81	7·3898070116	31	2·3186582759	81	9·0017775055
32	2·2037569378	82	7·5745521869	32	2·3824213785	82	9·2493263869
33	2·2588508612	83	7·7639159916	33	2·4479379664	83	9·5036828626
34	2·3153221327	84	7·9580138914	34	2·5152562605	84	9·7650341413
35	2·3732051861	85	8·1569642387	35	2·5844258077	85	10·0335725802
36	2·4325353157	86	8·3608883446	36	2·6554975174	86	10·3094958261
37	2·4933486986	87	8·5699105533	37	2·7285236991	87	10·5930069613
38	2·5556824161	88	8·7841583171	38	2·8035581008	88	10·8843146528
39	2·6195744765	89	9·0037622750	39	2·8806559486	89	11·1836333057
40	2·6850638384	90	9·2288563319	40	2·9598739872	90	11·4911832216
41	2·7521904343	91	9·4595777402	41	3·0412705218	91	11·8071907602
42	2·8209951952	92	9·6960671837	42	3·1249054612	92	12·1318885061
43	2·8915200751	93	9·9384688633	43	3·2108403614	93	12·4655154401
44	2·9638080770	94	10·1869305849	44	3·2991384713	94	12·8083171147
45	3·0379032789	95	10·4416038495	45	3·3898647793	95	13·1605458353
46	3·1138508609	96	10·7026439457	46	3·4830860607	96	13·5224608458
47	3·1916971324	97	10·9702100444	47	3·5788709274	97	13·8943285190
48	3·2714895607	98	11·2444652955	48	3·6772898779	98	14·2764225533
49	3·3532767997	99	11·5255769279	49	3·7784153495	99	14·6690241735
50	3·4371087197	100	11·8137163511	50	3·8823217716	100	15·0724223383

Amount of £1 in *n* years at the following rates per cent.

Years	3 per cent.	Years	3 per cent.	Years	3½ per cent.	Years	3½ per cent.
1	1·03	51	4·5154231993	1	1·035	51	5·7803992956
2	1·0609	52	4·6508858952	2	1·071225	52	5·9827132709
3	1·092727	53	4·7904124721	3	1·108717875	53	6·1921082354
4	1·12550881	54	4·9341248463	4	1·1475230006	54	6·4088320237
5	1·1592740743	55	5·0821485917	5	1·1876863056	55	6·6331411445
6	1·1940522965	56	5·2346130494	6	1·2292553263	56	6·8653010846
7	1·2298738654	57	5·3916514409	7	1·272792628	57	7·1055866225
8	1·2667700814	58	5·5534009841	8	1·3168090369	58	7·3542821543
9	1·3047731838	59	5·7200030136	9	1·3628973533	59	7·6116820297
10	1·3439163793	60	5·8916031040	10	1·4105987606	60	7·8780909008
11	1·3842338707	61	6·0683511972	11	1·4599697172	61	8·1538240823
12	1·4257608868	62	6·2504017331	12	1·5110686573	62	8·4392079252
13	1·4685337135	63	6·4379137851	13	1·5639560604	63	8·7345802026
14	1·5125897249	64	6·6310511986	14	1·6186945225	64	9·0402905096
15	1·5579674166	65	6·8299827346	15	1·6753488308	65	9·3567006775
16	1·6047064391	66	7·0348822166	16	1·7339860398	66	9·6841852012
17	1·6528476323	67	7·2459286831	17	1·7946755512	67	10·0231316832
18	1·7024330612	68	7·4633065436	18	1·8574891955	68	10·3739412921
19	1·7535060531	69	7·6872057399	19	1·9225013174	69	10·7370292374
20	1·8061112347	70	7·9178219121	20	1·9897888635	70	11·1128252607
21	1·8602945717	71	8·1553565695	21	2·0594314737	71	11·5017741448
22	1·9161034089	72	8·4000172666	22	2·1351151753	72	11·9043362399
23	1·9735865111	73	8·6520177846	23	2·2061144804	73	12·3209880083
24	2·0327941065	74	8·9115783181	24	2·2833284872	74	12·7522225886
25	2·0937779297	75	9·1789256676	25	2·3632449843	75	13·1985503792
26	2·1565912675	76	9·4542934377	26	2·4459585587	76	13·6604996424
27	2·2212890056	77	9·7379222408	27	2·5315671083	77	14·1386171299
28	2·2879276757	78	10·0300599080	28	2·6201719571	78	14·6334687295
29	2·3565655060	79	10·3309617053	29	2·7118779756	79	15·1456401350
30	2·4272624712	80	10·6408905564	30	2·8067937047	80	15·6757375397
31	2·5000803453	81	10·9601172731	31	2·9050314844	81	16·2243883536
32	2·5750827557	82	11·2889207913	32	3·0067075863	82	16·7922419460
33	2·6523352384	83	11·6275884151	33	3·1119423518	83	17·3799704141
34	2·7319052955	84	11·9764160675	34	3·2208603342	84	17·9882693786
35	2·8138624544	85	12·3357085495	35	3·3335904459	85	18·6178588068
36	2·8982783280	86	12·7057798060	36	3·4502661115	86	19·2694838651
37	2·9852266778	87	13·0869532002	37	3·5710254254	87	19·9439158004
38	3·0747834782	88	13·4795617962	38	3·6660113152	88	20·6419528534
39	3·1670269825	89	13·8839486501	39	3·8253717113	89	21·3644212032
40	3·2620377920	90	14·3004671096	40	3·9592597212	90	22·1121759453
41	3·3598989258	91	14·7294811229	41	4·0978338114	91	22·8861021034
42	3·4606958935	92	15·1713655566	42	4·24212579948	92	23·6871156771
43	3·5645167703	93	15·6265065233	43	4·3897020246	93	24·5161647258
44	3·6714522734	94	16·0953017190	44	4·5433415955	94	25·3742304912
45	3·7815958417	95	16·5781607705	45	4·7023585513	95	26·2623285583
46	3·8950437169	96	17·0755055936	46	4·8669411006	96	27·1815100579
47	4·0118950284	97	17·5877707615	47	5·0372840392	97	28·1328629099
48	4·1322518793	98	18·1154038843	48	5·2135889805	98	29·1175131118
49	4·2562194356	99	18·6588660008	49	5·3960645949	99	30·1366260707
50	4·3839060187	100	19·2186319809	50	5·5849268557	100	31·1914079831

TABLE I.

Amount of £1 in  $n$  years at the following rates per cent.

Years	4 per cent.	Years	4 per cent.	Years	4½ per cent.	Years	4½ per cent.
1	1'04	51	7'3909506801	1	1'045	51	9'4391049048
2	1'0816	52	7'6865887073	2	1'092025	52	9'8638646255
3	1'124864	53	7'9940522556	3	1'141166125	53	10'3077385337
4	1'16985856	54	8'3138143454	4	1'1925186006	54	10'7715867677
5	1'2166529024	55	8'6463669197	5	1'2461819377	55	11'2563081722
6	1'2653190185	56	8'9922155965	6	1'3022601248	56	11'7628420400
7	1'3159317792	57	9'3519104603	7	1'3608618305	57	12'2921699318
8	1'3685690504	58	9'7259868787	8	1'4221006128	58	12'8453175787
9	1'4233118124	59	10'1150263539	9	1'4860951404	59	13'4233568698
10	1'4802442849	60	10'5196274080	10	1'5529694217	60	14'0274079289
11	1'5394540563	61	10'9404125044	11	1'6228530457	61	14'6586412857
12	1'6010322186	62	11'3780290045	12	1'6958814328	62	15'3182801435
13	1'6650735073	63	11'8331501647	13	1'7721960972	63	16'0076027500
14	1'7316764476	64	12'3064761713	14	1'8519449216	64	16'7279448738
15	1'8009435055	65	12'7987352182	15	1'9352824431	65	17'4807023931
16	1'8729812457	66	13'3106846269	16	2'0223701530	66	18'2673340008
17	1'9479004956	67	13'8431120120	17	2'1133768099	67	19'0893640308
18	2'0258165154	68	14'3968364925	18	2'2084787664	68	19'9483854122
19	2'1068491760	69	14'9727099521	19	2'3078603108	69	20'8460627557
20	2'1911231430	70	15'5716183502	20	2'4117140248	70	21'7841355797
21	2'2787680688	71	16'1944830842	21	2'5202411560	71	22'7644216808
22	2'3699187915	72	16'8422624076	22	2'6336520080	72	23'7888206565
23	2'4647155432	73	17'5159529039	23	2'7521663483	73	24'8593175860
24	2'5633041649	74	18'2165910201	24	2'8760138340	74	25'9779868774
25	2'6658363315	75	18'9452546609	25	3'0054344565	75	27'1469962869
26	2'7724697847	76	19'7030648473	26	3'1406790071	76	28'3686111198
27	2'8833685761	77	20'4911874412	27	3'2820095624	77	29'6451986202
28	2'9987033192	78	21'3108349389	28	3'4296999927	78	30'9792325581
29	3'1186514519	79	22'1632683364	29	3'5840364924	79	32'3732980232
30	3'2433975100	80	23'0497990699	30	3'7453181345	80	33'8300964342
31	3'3731334104	81	23'9717910327	31	3'9138574506	81	35'3524507738
32	3'5080587468	82	24'9306626740	32	4'0899810359	82	36'9433110586
33	3'6483810967	83	25'9278891809	33	4'2740301825	83	38'6057600562
34	3'7943163406	84	26'9650047482	34	4'4663615407	84	40'3430192587
35	3'9460889942	85	28'0436049381	35	4'6673478100	85	42'1584551254
36	4'1039325540	86	29'1653491356	36	4'8773784615	86	44'0555856060
37	4'2680808561	87	30'3319631010	37	5'0968604922	87	46'0380869583
38	4'4388134504	88	31'5452416251	38	5'3262192144	88	48'1098008714
39	4'6163659884	89	32'8070512901	39	5'5658990790	89	50'2747419106
40	4'8010206279	90	34'1193333417	40	5'8163645376	90	52'5371052966
41	4'9930614531	91	35'4841066753	41	6'0781009418	91	54'9012750350
42	5'1927839112	92	36'9034709424	42	6'3516154842	92	57'3718324115
43	5'4004952676	93	38'3796097801	43	6'6374381810	93	59'9535648701
44	5'6165150783	94	39'9147941713	44	6'9361228991	94	62'6514752892
45	5'8411756815	95	41'5113859381	45	7'2482484296	95	65'4707916772
46	6'0748227087	96	43'1718413756	46	7'5744196089	96	68'4169773027
47	6'3178156171	97	44'8987150307	47	7'9152684913	97	71'4957412813
48	6'5705282417	98	46'6946636319	48	8'2714555734	98	74'7130496390
49	6'8333493714	99	48'5624501772	49	8'6436710742	99	78'0751368727
50	7'1066833463	100	50'5049481842	50	9'0326362725	100	81'5885180320

Amount of £1 in n years at the following rates per cent.

Years	5 per cent.	Years	5 per cent.	Years	5½ per cent.	Years	5½ per cent.
1	1'05	51	12'0407697750	1	1'055	51	15'3417690708
2	1'1025	52	12'6428082638	2	1'113025	52	16'1855663697
3	1'157625	53	13'2749486769	3	1'174241375	53	17'0757725200
4	1'21550625	54	13'9386961108	4	1'2388246506	54	18'0149400086
5	1'2762815625	55	14'6356309164	5	1'3069600064	55	19'0057617091
6	1'3400956406	56	15'3674124622	6	1'3788428068	56	20'0510786031
7	1'4071004227	57	16'1357830853	7	1'4546791611	57	21'1538879262
8	1'4774554438	58	16'9425722396	8	1'5346865150	58	22'3173517622
9	1'5513282160	59	17'7897008516	9	1'6190942733	59	23'5448061091
10	1'6288946268	60	18'6791858941	10	1'7081444584	60	24'8397704451
11	1'7103393581	61	19'6131451888	11	1'8020924036	61	26'2059578196
12	1'7958563260	62	20'5938024483	12	1'9012074858	62	27'6472854996
13	1'8856491423	63	21'6234925707	13	2'0057738975	63	29'1678862021
14	1'9799315994	64	22'7046671992	14	2'1160914618	64	30'7721199432
15	2'0789281794	65	23'8399005592	15	2'2324764922	65	32'4645865401
16	2'1828745884	66	25'0318955872	16	2'3552626993	66	34'2501387998
17	2'2920183178	67	26'2834903665	17	2'4848021478	67	36'1338964338
18	2'4066192337	68	27'5976648848	18	2'6214662659	68	38'1212607377
19	2'5269501954	69	28'9775481291	19	2'7656469105	69	40'2179300782
20	2'6532977051	70	30'4264255355	20	2'9177574906	70	42'4299162325
21	2'7859625904	71	31'9477468123	21	3'0782341526	71	44'7635616253
22	2'9252607199	72	33'5451341529	22	3'2475370310	72	47'2255575147
23	3'0715237559	73	35'2223908606	23	3'4265155677	73	49'8229631780
24	3'2250999437	74	36'9835104036	24	3'6145899039	74	52'5632261528
25	3'3863549409	75	38'8326859238	25	3'8133923486	75	55'4542035912
26	3'556726879	76	40'7743202199	26	4'0231289278	76	58'5041847888
27	3'7334563223	77	42'8130362310	27	4'2444010188	77	61'7219149521
28	3'9201291385	78	44'9536880425	28	4'4778430749	78	65'1166202745
29	4'1161355954	79	47'2013724446	29	4'7241244440	79	68'6980343896
30	4'3219423752	80	49'5614410669	30	4'9839512884	80	72'4764262810
31	4'5380394939	81	52'0395131202	31	5'2580686093	81	76'4626297265
32	4'7649414686	82	54'6414887762	32	5'5472623828	82	80'6680743614
33	5'0031885420	83	57'3735632150	33	5'8523618138	83	85'1048184513
34	5'2533479691	84	60'2422413758	34	6'1742417136	84	89'7855834661
35	5'5160153676	85	63'2543534446	35	6'5138250078	85	94'7237905568
36	5'7918161360	86	66'4170711168	36	6'8720853833	86	99'9335990374
37	6'0814069428	87	69'7379246726	37	7'2500500793	87	105'4299469845
38	6'3854772899	88	73'2248209063	38	7'6488028337	88	111'2285940686
39	6'7047511544	89	76'8860619516	39	8'0694869895	89	117'3461667424
40	7'0399887121	90	80'7303650492	40	8'5133087740	90	123'8002059132
41	7'3919881477	91	84'7668833016	41	8'9815407565	91	130'6092172384
42	7'7615875551	92	89'0052274667	42	9'4755254982	92	137'7927241865
43	8'1496669329	93	93'4554888400	43	9'9966794005	93	145'3713240168
44	8'5571502795	94	98'1282632820	44	10'5464967676	94	153'3667469377
45	8'9850077935	95	103'0346764461	45	11'1265540898	95	161'8019179138
46	9'4342581832	96	108'1864102685	46	11'7385145647	96	170'7010233991
47	9'9059710923	97	113'5957307819	47	12'3841328658	97	180'0895796860
48	10'4012696469	98	119'2755173210	48	13'0662601734	98	189'9945065687
49	10'9213331293	99	125'2392931870	49	13'7838494830	99	200'4442044300
50	11'4673997858	100	131'5012578464	50	14'5419612045	100	211'4686356737

TABLE I.

Amount of £1 in  $n$  years at the following rates per cent.

Years	6 per cent.	Years	6 per cent.	Years	7 per cent.	Years	7 per cent.
1	1.06	51	19.5253635315	1	1.07	51	31.5190168175
2	1.1236	52	20.6968853434	2	1.1449	52	33.7253479947
3	1.191016	53	21.9386984640	3	1.225043	53	36.0861223543
4	1.26247696	54	23.2550203718	4	1.31079601	54	38.6121509191
5	1.3382255776	55	24.6503215941	5	1.4025517307	55	41.3150014834
6	1.4185191123	56	26.1293408898	6	1.5007303518	56	44.2070515873
7	1.5036305290	57	27.6971013432	7	1.6057814765	57	47.3015451084
8	1.5938480745	58	29.3589274238	8	1.7181861798	58	50.6126533623
9	1.6894789590	59	31.1204630692	9	1.8384592124	59	54.1555390976
10	1.7908476965	60	32.9876908533	10	1.9671513573	60	57.9464268345
11	1.8982985883	61	34.9669523045	11	2.1048519523	61	62.0026767129
12	2.0121964718	62	37.0649694428	12	2.2521915890	62	66.3428640828
13	2.1329282601	63	39.2888676094	13	2.4098450002	63	70.9868645686
14	2.2609039558	64	41.6461996659	14	2.5785341502	64	75.9559450884
15	2.3965581931	65	44.1449716459	15	2.7590315407	65	81.2728612446
16	2.5403516847	66	46.7936699447	16	2.9521637486	66	86.9619615317
17	2.6927727858	67	49.6012901413	17	3.1588152110	67	93.0492988389
18	2.8543391529	68	52.5773675498	18	3.3799322757	68	99.5627497577
19	3.0255995021	69	55.7320096028	19	3.6165275350	69	106.5321422407
20	3.2071354722	70	59.0759301790	20	3.8696844625	70	113.9893921975
21	3.3995636005	71	62.6204859897	21	4.1405623749	71	121.9686496514
22	3.6035374166	72	66.3777151491	22	4.4304017411	72	130.5064551270
23	3.8197496616	73	70.3603780580	23	4.7405298630	73	139.6419069858
24	4.0489346413	74	74.5820007415	24	5.0723669534	74	149.4168404749
25	4.2918707197	75	79.0569207860	25	5.4274326401	75	159.8760193081
26	4.5493829629	76	83.8003360332	26	5.8073539249	76	171.0673406597
27	4.8223459407	77	88.8283561952	27	6.2138676297	77	183.0420545058
28	5.1116866971	78	94.1580575669	28	6.6488383637	78	195.8549983212
29	5.4183878990	79	99.8075410209	29	7.1142570492	79	209.5648482037
30	5.7434911729	80	105.7959934821	30	7.6122550427	80	224.2343874780
31	6.0881006433	81	112.1437530911	31	8.1451128956	81	239.9307947085
32	6.4533866819	82	118.8723782765	32	8.7152707983	82	256.7259503380
33	6.8405898828	83	126.0047209731	33	9.3253397542	83	274.6967668617
34	7.2510252758	84	133.5650042315	34	9.9781135370	84	293.9255405420
35	7.6860867923	85	141.5789044854	35	10.6765814846	85	314.5003283799
36	8.1472519999	86	150.0736387545	36	11.4239421885	86	336.5153513666
37	8.6360871108	87	159.0780570798	37	12.2236181417	87	360.0714259622
38	9.1542523470	88	168.6227405046	38	13.0792714116	88	385.2764257796
39	9.7035074879	89	178.7401049348	39	13.9948204105	89	412.2457755842
40	10.2857179371	90	189.4645112309	40	14.9744578392	90	441.1029798750
41	10.9028610134	91	200.8323819048	41	16.0226698879	91	471.9801884663
42	11.5570326742	92	212.8823248191	42	17.1442567801	92	505.0188016589
43	12.2504546346	93	225.6552643082	43	18.3443547547	93	540.3701177751
44	12.9854819127	94	239.1945801667	44	19.6284595875	94	578.1960260193
45	13.7646108274	95	253.5462549767	45	21.0024517587	95	618.6697478407
46	14.5904874771	96	268.7590302753	46	22.4726233818	96	661.9766301895
47	15.4659167257	97	284.8845720918	47	24.0457070185	97	708.3149943028
48	16.3938717293	98	301.9776464174	48	25.7897043908	98	757.8970439040
49	17.3775040330	99	320.0963052024	49	27.5299299655	99	810.9498369773
50	18.4210542750	100	339.3020835145	50	29.4570250630	100	867.7163255657

Amount of £1 in n years at the following rates per cent.

Years	8 per cent.	Years	8 per cent.	Years	9 per cent.	Years	9 per cent.
1	1'08	51	50'6537415143	1	1'09	51	81'0496968827
2	1'1664	52	54'7060408355	2	1'1881	52	88'3441696021
3	1'259712	53	59'0825241023	3	1'295029	53	96'2951448663
4	1'36048896	54	63'8091260305	4	1'41158161	54	104'9617079043
5	1'4693280768	55	68'9138561129	5	1'5386239549	55	114'4082616157
6	1'5868743229	56	74'4269646020	6	1'6771001108	56	124'7050051611
7	1'7138242688	57	80'3811217701	7	1'8280391208	57	135'9284556256
8	1'8509302103	58	86'8116115117	8	1'9925626417	58	148'1620166319
9	1'9990046271	59	93'7565404327	9	2'1718932794	59	161'4965981287
10	2'1589249973	60	101'2570636673	10	2'3673636746	60	176'0312919603
11	2'3316389971	61	109'3576287606	11	2'5804264053	61	191'8741082367
12	2'5181701168	62	118'1062390615	12	2'8126647818	62	209'1427797980
13	2'7196237262	63	127'5547381864	13	3'0658046121	63	227'9656279961
14	2'9371936243	64	137'7599172413	14	3'3417270272	64	248'4825345157
15	3'1721691142	65	148'7798466206	15	3'642824597	65	270'8459626221
16	3'4259426433	66	160'6822343503	16	3'970358811	66	295'2220992581
17	3'7000180548	67	173'5368130983	17	4'3276334104	67	321'7920881913
18	3'9960194992	68	187'4197581462	18	4'7171204173	68	350'7533761286
19	4'3157010591	69	202'4133387979	19	5'1416612548	69	382'3211799801
20	4'6609571439	70	218'6064059017	20	5'6044107678	70	416'7300861784
21	5'0338337154	71	236'0949183738	21	6'1088077369	71	454'2357939344
22	5'4365404126	72	254'9825118437	22	6'6586004332	72	495'1170153885
23	5'8714636456	73	275'3811127912	23	7'2578744722	73	539'6775467735
24	6'3411807372	74	297'4116018145	24	7'9110831747	74	588'2485259831
25	6'8484751962	75	321'2045299597	25	8'6230806604	75	641'1908933216
26	7'3963532119	76	346'9008923505	26	9'3991579198	76	698'8980737205
27	7'9880614689	77	374'6529637450	27	10'2450821326	77	761'7989003553
28	8'6271063864	78	404'6252008446	28	11'1617395246	78	830'3608013873
29	9'3172748973	79	436'9952169122	29	12'1721820818	79	905'0932735122
30	10'0626568891	80	471'9548342651	30	13'2676784691	80	986'5516681283
31	10'8676694402	81	509'7112210063	31	14'4617695314	81	1075'3413182598
32	11'7370829954	82	550'4881186869	32	15'7633287892	82	1172'1220369032
33	12'6760496351	83	594'5271681818	33	17'1820283802	83	1277'6130202245
34	13'6001336059	84	642'0893416363	34	17'284109344	84	1392'5981920447
35	14'7853442943	85	693'4564889673	35	20'4139679185	85	1517'9320293287
36	15'9681718379	86	748'9330080846	36	22'2512250312	86	1654'5459110683
37	17'2456255849	87	808'8476487314	37	24'2538352840	87	1803'4550404055
38	18'6252756317	88	873'5546606299	38	26'4366804596	88	1965'7659980095
39	20'1152976822	89	943'4398974803	39	28'8159817009	89	2142'6849378304
40	21'7245214968	90	1018'9150892787	40	31'4094200540	90	2335'5265822351
41	23'4624832166	91	1100'4282964210	41	34'2362678589	91	2545'7239746463
42	25'3394818739	92	1188'4625601347	42	37'3175319662	92	2774'8391323536
43	27'3666404238	93	1283'5395649455	43	40'6761098431	93	3024'5746542654
44	29'5559716577	94	1386'2227301411	44	44'3369597290	94	3296'7863731493
45	31'9204493903	95	1497'1205485524	45	48'3272861046	95	3593'4971467327
46	34'4740853415	96	1616'8091924366	46	52'6767418540	96	3916'9118899387
47	37'2320121689	97	1746'2414078316	47	57'4176486209	97	4269'4339600331
48	40'2105731424	98	1885'9407204581	48	62'5852369968	98	4653'6830164361
49	43'4274189938	99	2036'8159780947	49	68'2179083265	99	5072'5144879154
50	46'9016125133	100	2199'7612563423	50	74'3575200758	100	5529'0407918277

TABLE I.

Amount of £1 in n years at the following rates per cent.

Years	10 per cent.	Years	10 per cent.	Years	11 per cent.	Years	11 per cent.
1	1'10	51	129'129938	1	1'11	51	204'866958
2	1'21	52	142'042932	2	1'2321	52	227'402323
3	1'331	53	156'247225	3	1'367361	53	252'416579
4	1'4641	54	171'871948	4	1'518070	54	280'182402
5	1'61051	55	189'059142	5	1'685058	55	311'002466
6	1'771561	56	207'965057	6	1'870415	56	345'212738
7	1'948717	57	228'761562	7	2'076160	57	383'186139
8	2'143589	58	251'637719	8	2'304538	58	425'336614
9	2'357948	59	276'801490	9	2'558037	59	472'123642
10	2'593742	60	304'481640	10	2'839421	60	524'057242
11	2'853117	61	334'929803	11	3'151757	61	581'703539
12	3'138428	62	368'422784	12	3'498851	62	645'690928
13	3'452271	63	405'265062	13	3'883280	63	716'716930
14	3'797498	64	445'791568	14	4'310441	64	795'555793
15	4'177248	65	490'370725	15	4'784589	65	883'066930
16	4'594973	66	539'407798	16	5'310894	66	980'204292
17	5'054470	67	593'348578	17	5'895093	67	1088'026764
18	5'559917	68	652'683435	18	6'543553	68	1207'709708
19	6'115909	69	717'951779	19	7'263344	69	1340'557776
20	6'727500	70	789'746957	20	8'062312	70	1488'019132
21	7'400250	71	868'721652	21	8'949166	71	1651'701236
22	8'140275	72	955'593818	22	9'933574	72	1833'388372
23	8'954302	73	1051'153200	23	11'026267	73	2035'061093
24	9'849733	74	1156'268519	24	12'239157	74	2258'917813
25	10'834706	75	1271'895371	25	13'585464	75	2507'398773
26	11'918177	76	1399'084909	26	15'079865	76	2783'212638
27	13'109994	77	1538'993399	27	16'738650	77	3089'366028
28	14'420994	78	1692'892739	28	18'579901	78	3429'196291
29	15'863093	79	1862'182013	29	20'623691	79	3806'407883
30	17'449402	80	2048'400215	30	22'892297	80	4225'112750
31	19'194342	81	2253'240236	31	25'410449	81	4689'875153
32	21'113777	82	2478'564260	32	28'205599	82	5205'761420
33	23'225154	83	2726'420686	33	31'308214	83	5778'395176
34	25'547670	84	2999'062754	34	34'752118	84	6414'018645
35	28'102437	85	3298'969030	35	38'574851	85	7119'560696
36	30'912681	86	3628'865933	36	42'818085	86	7902'712373
37	34'003949	87	3991'752526	37	47'528074	87	8772'010734
38	37'404343	88	4390'927778	38	52'756162	88	9736'931915
39	41'144778	89	4830'020556	39	58'559340	89	10807'994425
40	45'259256	90	5313'022612	40	65'000867	90	11996'873812
41	49'785181	91	5844'324873	41	72'150963	91	13316'529932
42	54'763699	92	6428'757360	42	80'087569	92	14781'348224
43	60'240069	93	7071'633096	43	88'897201	93	16407'296529
44	66'264076	94	7778'796406	44	98'675893	94	18212'099147
45	72'890484	95	8556'676047	45	109'530242	95	20215'430053
46	80'179532	96	9412'343651	46	121'578568	96	22439'127359
47	88'197485	97	10353'578016	47	134'952211	97	24907'431368
48	97'017234	98	11388'935818	48	149'796954	98	27647'248819
49	106'718957	99	12527'829400	49	166'274619	99	30688'446189
50	117'390853	100	13780'612340	50	184'564827	100	34064'175270



Amount of £1 in n years at the following rates per cent.

Years	12 per cent.	Years	12 per cent.	Years	13 per cent.	Years	13 per cent.
1	1'12	51	323'582453	1	1'13	51	509'331595
2	1'2544	52	362'524347	2	1'2769	52	575'544703
3	1'404928	53	406'027269	3	1'442897	53	650'365514
4	1'573519	54	454'750541	4	1'630474	54	734'913031
5	1'762342	55	509'320606	5	1'842435	55	830'451725
6	1'973823	56	570'439078	6	2'081952	56	938'410449
7	2'210681	57	638'891768	7	2'352605	57	1060'403808
8	2'475963	58	715'558780	8	2'658444	58	1198'256303
9	2'773079	59	801'425833	9	3'004042	59	1354'029622
10	3'105848	60	897'596933	10	3'394567	60	1530'053473
11	3'478550	61	1005'308566	11	3'835861	61	1728'960425
12	3'895976	62	1125'945593	12	4'334523	62	1953'725280
13	4'363493	63	1261'059065	13	4'898011	63	2207'709566
14	4'887112	64	1412'386152	14	5'534753	64	2494'711810
15	5'473566	65	1581'872491	15	6'254270	65	2819'024345
16	6'130394	66	1771'697189	16	7'067326	66	3185'497510
17	6'866041	67	1984'300852	17	7'986078	67	3599'612186
18	7'689966	68	2222'416954	18	9'024268	68	4067'561770
19	8'612762	69	2489'106989	19	10'197423	69	4596'344800
20	9'646293	70	2787'799828	20	11'523088	70	5193'869624
21	10'803848	71	3122'335807	21	13'021089	71	5869'072675
22	12'100310	72	3497'016104	22	14'713831	72	6632'052123
23	13'552347	73	3916'658036	23	16'626629	73	7494'218899
24	15'178629	74	4386'657001	24	18'788091	74	8468'467356
25	17'000064	75	4913'055841	25	21'230542	75	9569'368112
26	19'040072	76	5502'622542	26	23'990513	76	10813'385967
27	21'324881	77	6162'937247	27	27'109279	77	12219'126143
28	23'883866	78	6902'489716	28	30'633486	78	13807'612541
29	26'749930	79	7730'788482	29	34'615839	79	15602'602172
30	29'959922	80	8658'483100	30	39'115898	80	17630'940454
31	33'555113	81	9697'501072	31	44'200965	81	19922'962713
32	37'581726	82	10861'201201	32	49'947090	82	22512'947866
33	42'091533	83	12164'545345	33	56'440212	83	25439'631089
34	47'142517	84	13624'290786	34	63'777439	84	28746'783130
35	52'799620	85	15259'205681	35	72'068506	85	32483'864937
36	59'135574	86	17090'310362	36	81'437412	86	36706'767379
37	66'231843	87	19141'147606	37	92'024276	87	41478'647138
38	74'179664	88	21438'085318	38	103'987432	88	46870'871266
39	83'081224	89	24010'655557	39	117'505798	89	52964'084530
40	93'050970	90	26891'934223	40	132'781552	90	59849'415520
41	104'217087	91	30118'966330	41	150'043153	91	67629'839537
42	116'723137	92	33733'242290	42	169'548763	92	76421'718677
43	130'729914	93	37781'231365	43	191'590103	93	86356'542105
44	146'417503	94	42314'979128	44	216'496816	94	97582'892578
45	163'987604	95	47392'776624	45	244'641402	95	110268'668614
46	183'666116	96	53079'909819	46	276'444784	96	124603'595533
47	205'706050	97	59449'498097	47	312'382606	97	140802'062953
48	230'390776	98	66583'438876	48	352'9202345	98	159106'331137
49	258'037669	99	74573'451542	49	398'881350	99	179790'154184
50	289'002190	100	83522'265727	50	450'735925	100	203162'874228

TABLE I.

Amount of £1 in  $n$  years at the following rates per cent.

Years	14 per cent.	Years	14 per cent.	Years	15 per cent.	Years	15 per cent.
1	1'14	51	798'265607	1	1'15	51	1246'206058
2	1'2996	52	910'022792	2	1'3225	52	1433'136966
3	1'481544	53	1037'425983	3	1'520875	53	1648'107511
4	1'688960	54	1182'665620	4	1'749006	54	1895'323638
5	1'925415	55	1348'238807	5	2'011357	55	2179'622184
6	2'194973	56	1536'992240	6	2'313061	56	2506'565512
7	2'502269	57	1752'171154	7	2'660020	57	2882'550338
8	2'852586	58	1997'475115	8	3'059023	58	3314'932889
9	3'251949	59	2277'121631	9	3'517876	59	3812'172822
10	3'707221	60	2595'918660	10	4'045558	60	4383'998746
11	4'226232	61	2959'347272	11	4'652391	61	5041'598558
12	4'817905	62	3373'655890	12	5'350250	62	5797'838341
13	5'492411	63	3845'967715	13	6'152788	63	6667'514092
14	6'261349	64	4384'403195	14	7'075706	64	7667'641206
15	7'137938	65	4998'219642	15	8'137062	65	8817'787387
16	8'137249	66	5697'970392	16	9'357621	66	10140'455495
17	9'276464	67	6495'686247	17	10'761264	67	11661'523819
18	10'575169	68	7405'082321	18	12'375454	68	13410'752392
19	12'055693	69	8441'793846	19	14'231772	69	15422'365251
20	13'743490	70	9623'644985	20	16'366537	70	17735'720039
21	15'667578	71	10970'955283	21	18'821518	71	20396'078045
22	17'861039	72	12506'889022	22	21'644746	72	23455'489751
23	20'361585	73	14257'853485	23	24'891458	73	26973'813214
24	23'212207	74	16253'952973	24	28'625176	74	31019'885196
25	26'461916	75	18529'506390	25	32'918953	75	35672'867976
26	30'166584	76	21123'637284	26	37'856796	76	41023'798172
27	34'389906	77	24080'946504	27	43'535315	77	47177'367898
28	39'204493	78	27452'279015	28	50'065612	78	54253'973082
29	44'693122	79	31295'598077	29	57'575454	79	62392'069045
30	50'950159	80	35676'981807	30	66'211772	80	71750'879401
31	58'083181	81	40671'759260	31	76'143538	81	82513'511312
32	66'214826	82	46365'805557	32	87'565068	82	94890'538008
33	75'484902	83	52857'018335	33	100'699829	83	109124'118710
34	86'052788	84	60257'000902	34	115'804803	84	125492'736516
35	98'100178	85	68692'981028	35	133'175523	85	144316'646994
36	111'834203	86	78309'998372	36	153'151852	86	165964'144043
37	127'490992	87	89273'398144	37	176'124630	87	190858'765649
38	145'339731	88	101771'673884	38	202'543324	88	219487'580496
39	165'687293	89	116019'708227	39	232'924823	89	252410'717571
40	188'883514	90	132262'467379	40	267'863546	90	290272'325206
41	215'327206	91	150779'212812	41	308'043078	91	333813'173987
42	245'473015	92	171888'302606	42	354'249540	92	383885'150085
43	279'839237	93	195952'664971	43	407'386971	93	441467'922598
44	319'016730	94	223386'038067	44	468'495017	94	507688'110988
45	363'679072	95	254660'083396	45	538'769269	95	583841'327636
46	414'594142	96	290312'495072	46	619'584659	96	671417'526781
47	472'637322	97	330956'244382	47	712'522358	97	772130'155799
48	538'806547	98	377290'118595	48	819'400712	98	887949'679168
49	614'239464	99	430110'735199	49	942'310819	99	1021142'131044
50	700'232988	100	490326'238126	50	1083'657442	100	1174313'450700

Amount of £1 in n years at the following rates per cent.

Years	16 per cent.	Years	16 per cent.	Years	17 per cent.	Years	17 per cent.
1	1'16	51	1938'01641	1	1'17	51	3002'47188
2	1'3456	52	2248'09904	2	1'3689	52	3512'89210
3	1'56090	53	2607'79488	3	1'60161	53	4110'08376
4	1'81064	54	3025'04207	4	1'87388	54	4808'79800
5	2'10034	55	3509'04880	5	2'19244	55	5626'29366
6	2'43640	56	4070'49660	6	2'56516	56	6582'76358
7	2'82621	57	4721'77606	7	3'00124	57	7701'83339
8	3'27841	58	5477'26023	8	3'51145	58	9011'14507
9	3'80296	59	6353'62187	9	4'10840	59	10543'03973
10	4'41144	60	7370'20137	10	4'80682	60	12335'35648
11	5'11726	61	8549'43358	11	5'62399	61	14432'36708
12	5'93603	62	9917'34296	12	6'58007	62	16885'86949
13	6'88579	63	11504'11783	13	7'69868	63	19756'46730
14	7'98752	64	13344'77668	14	9'00745	64	23115'06674
15	9'26552	65	15479'94095	15	10'53872	65	27044'62809
16	10'74800	66	17956'73150	16	12'33030	66	31642'21486
17	12'46768	67	20829'80855	17	14'42646	67	37021'39139
18	14'46251	68	24162'57791	18	16'87895	68	43315'02793
19	16'77652	69	28028'59038	19	19'74838	69	50678'58267
20	19'46076	70	32513'16484	20	23'10560	70	59293'94173
21	22'57448	71	37715'27121	21	27'03355	71	69373'91182
22	26'18640	72	43749'71461	22	31'62925	72	81167'47683
23	30'37622	73	50749'66895	23	37'00623	73	94965'94789
24	35'23642	74	58869'61598	24	43'29729	74	111110'15904
25	40'87424	75	68288'75453	25	50'65783	75	129998'88607
26	47'41412	76	79214'95526	26	59'26966	76	152098'69670
27	55'00038	77	91889'34810	27	69'34550	77	177955'47514
28	63'80044	78	106591'64379	28	81'13423	78	208207'90592
29	74'00851	79	123646'30680	29	94'92705	79	243603'24992
30	85'84988	80	143429'71589	30	111'06465	80	285015'80241
31	99'58586	81	166378'47043	31	129'94564	81	333468'48882
32	115'51959	82	192999'02570	32	152'03640	82	390158'13192
33	134'00273	83	223878'86981	33	177'88259	83	456485'01435
34	155'44317	84	259699'48898	34	208'12263	84	534087'46679
35	180'31407	85	301251'40722	35	243'50347	85	624882'33614
36	209'16432	86	349451'63238	36	284'89906	86	731112'33329
37	242'63062	87	405363'89356	37	333'33191	87	855401'42994
38	281'45151	88	470222'11653	38	389'99833	88	1000819'67303
39	326'48376	89	545457'65517	39	456'28805	89	1170959'01745
40	378'72116	90	632730'88000	40	533'86871	90	1370022'05042
41	439'31654	91	733967'82080	41	624'62639	91	1602925'79899
42	509'60719	92	851402'67213	42	730'81288	92	1875423'18482
43	591'14434	93	987627'09967	43	855'05107	93	2194245'12623
44	685'72744	94	1145647'43561	44	1000'40975	94	2567266'79769
45	795'44383	95	1328951'02531	45	1170'47941	95	3003702'15330
46	922'71484	96	1541583'18936	46	1369'46091	96	3514331'51936
47	1070'34921	97	1788236'49966	47	1602'26927	97	4111767'87766
48	1241'60509	98	2074354'33961	48	1874'65504	98	4810768'41686
49	1440'26190	99	2406251'03394	49	2193'34640	99	5628599'04772
50	1670'70380	100	2791251'19938	50	2566'21528	100	6585460'88584

TABLE I.

Amount of £1 in n years at the following rates per cent.

Years	18 per cent.	Years	18 per cent.	Years	19 per cent.	Years	19 per cent.
1	1'18	51	4634'28109	1	1'19	51	7126'80754
2	1'3924	52	5468'45169	2	1'4161	52	8480'90098
3	1'64303	53	6452'77300	3	1'68516	53	10092'27216
4	1'93878	54	7614'27214	4	2'00534	54	12009'80387
5	2'28776	55	8984'84112	5	2'38635	55	14291'66661
6	2'69955	56	10602'11252	6	2'83976	56	17007'08327
7	3'18547	57	12510'49278	7	3'37932	57	20238'42909
8	3'75886	58	14762'38148	8	4'02139	58	24083'73061
9	4'43545	59	17419'61014	9	4'78545	59	28659'63943
10	5'23384	60	20555'13997	10	5'69468	60	34104'97092
11	6'17593	61	24255'06516	11	6'77667	61	40584'91539
12	7'28759	62	28620'97689	12	8'06424	62	48296'04932
13	8'59936	63	33772'75273	13	9'59645	63	57472'29869
14	10'14724	64	39851'84822	14	11'41977	64	68392'03544
15	11'97375	65	47025'18090	15	13'58953	65	81386'52217
16	14'12902	66	55489'71346	16	16'17154	66	96849'96139
17	16'67225	67	65477'86188	17	19'24413	67	115251'45405
18	19'67325	68	77263'87702	18	22'90052	68	137149'23032
19	23'21444	69	91171'37489	19	27'25162	69	163207'58408
20	27'39303	70	107582'22237	20	32'42942	70	194217'02506
21	32'32378	71	126947'02239	21	38'59101	71	231118'25982
22	38'14206	72	149797'48643	22	45'92331	72	275030'72918
23	45'00763	73	176761'03398	23	54'64873	73	327286'56773
24	53'10901	74	208578'02010	24	65'03199	74	389471'01560
25	62'66863	75	246122'06372	25	77'38807	75	463470'50856
26	73'94898	76	290424'03518	26	92'09181	76	551529'90518
27	87'25980	77	342700'36152	27	109'58925	77	656320'58717
28	102'96656	78	404386'42659	28	130'41121	78	781021'49873
29	121'50054	79	477175'98338	29	155'18934	79	929415'58349
30	143'37064	80	563067'66039	30	184'67531	80	1106004'54435
31	169'17735	81	664419'83926	31	219'76362	81	1316145'40778
32	199'62928	82	784015'41032	32	261'51871	82	1566213'03526
33	235'56255	83	925138'18418	33	311'20726	83	1863793'51196
34	277'96381	84	1091663'05733	34	370'33664	84	2217914'27923
35	327'99729	85	1288162'40765	35	440'70061	85	2639317'99228
36	387'03680	86	1520031'64103	36	524'43372	86	3140788'41082
37	456'70343	87	1793637'33641	37	624'07613	87	3737538'20887
38	538'91004	88	2116492'05697	38	742'65059	88	4447670'46856
39	635'91385	89	2497460'62722	39	883'75421	89	529277'85759
40	750'37834	90	2947003'54012	40	1051'66751	90	6298346'15053
41	885'44645	91	3477464'17734	41	1251'48433	91	7495031'91913
42	1044'82681	92	4103407'72926	42	1489'26636	92	8919087'98376
43	1232'89563	93	4842021'12053	43	1772'22696	93	10613714'70068
44	1454'81685	94	5713584'92223	44	2108'95009	94	12630320'49381
45	1716'68388	95	6742030'20823	45	2509'65060	95	15030081'38763
46	2025'68698	96	7955595'64571	46	2986'48422	96	17885796'85128
47	2390'31063	97	9387602'86194	47	3553'91622	97	21284098'25302
48	2820'56655	98	11077371'37708	48	4229'16030	98	25328076'92110
49	3328'26853	99	13071298'22496	49	5032'70076	99	30140411'53611
50	3927'35686	100	15424131'90545	50	5988'91390	100	35867089'72797

Amount of £1 in n years at the following rates per cent.

Years	20 per cent.	Years	20 per cent.	Years	21 per cent.	Years	21 per cent.
1	1'20	51	10920'52578	1	1'21	51	16674'54093
2	1'440	52	13104'63094	2	1'4641	52	20176'19453
3	1'7280	53	15725'55712	3	1'77156	53	24413'19538
4	2'07360	54	18870'66855	4	2'14359	54	29539'96641
5	2'48832	55	22644'80226	5	2'59374	55	35743'35935
6	2'98598	56	27173'76271	6	3'13843	56	43249'46482
7	3'58318	57	32608'51525	7	3'79750	57	52331'85243
8	4'29982	58	39130'21830	8	4'59497	58	63321'54144
9	5'15978	59	46956'26196	9	5'55992	59	76619'06514
10	6'19174	60	56347'51435	10	6'72750	60	92709'06882
11	7'43008	61	67617'01722	11	8'14027	61	112177'97327
12	8'91610	62	81140'42067	12	9'84973	62	135735'34766
13	10'69932	63	97368'50480	13	11'91818	63	164239'77066
14	12'83918	64	116842'20576	14	14'42099	64	198730'12250
15	15'40702	65	140210'64692	15	17'44940	65	240463'44823
16	18'48843	66	168252'77630	16	21'11378	66	290960'77236
17	22'18611	67	201903'33156	17	25'54767	67	352062'53455
18	26'62333	68	242283'99787	18	30'91268	68	425995'66681
19	31'94800	69	290740'79744	19	37'40434	69	515454'75684
20	38'33760	70	348888'95693	20	45'25926	70	623700'25577
21	46'00512	71	418666'74832	21	54'76370	71	754677'30949
22	55'20614	72	502400'09798	22	66'26408	72	913159'54448
23	66'24737	73	602880'11758	23	80'17953	73	1104923'04882
24	79'49685	74	723456'14109	24	97'01723	74	1336956'88907
25	95'39622	75	868147'36931	25	117'39085	75	1617717'83578
26	114'47546	76	1041776'84318	26	142'04293	76	1957438'58129
27	137'37055	77	1250132'21181	27	171'87195	77	2368500'68336
28	164'84466	78	1500158'65417	28	207'96506	78	2865885'82686
29	197'81359	79	1800190'38501	29	251'63772	79	3467721'85051
30	237'37631	80	2160228'46201	30	304'48164	80	4195943'43911
31	284'85158	81	2592274'15441	31	368'42278	81	5077091'56133
32	341'82189	82	3110728'98529	32	445'79157	82	6143280'78921
33	410'18627	83	3732874'78235	33	539'40780	83	7433369'75494
34	492'22352	84	4479449'73882	34	652'68344	84	8994377'40348
35	590'66823	85	5375339'68659	35	789'74696	85	10883196'65821
36	708'80187	86	6450407'62391	36	955'59382	86	13168667'95643
37	850'56225	87	7740489'14869	37	1156'26852	87	15934088'22728
38	1020'67470	88	9288586'97843	38	1399'08491	88	19280246'75501
39	1224'80964	89	11146304'37411	39	1692'89274	89	23329098'57356
40	1469'77157	90	13375565'24893	40	2048'40021	90	28228209'27401
41	1763'72588	91	16050678'29872	41	2478'56426	91	34156133'22154
42	2116'47106	92	19260813'95847	42	2999'06275	92	41328921'19807
43	2539'76527	93	23112976'75016	43	3628'86593	93	50007994'64967
44	3047'71832	94	27735572'10019	44	4390'92778	94	60509673'52610
45	3657'26199	95	33282686'52023	45	5313'02261	95	73216704'96658
46	4388'71439	96	39939223'82427	46	6428'75736	96	88592213'00956
47	5266'45726	97	47927068'58913	47	7778'79641	97	107196577'74156
48	6319'74872	98	57512482'30695	48	9412'34365	98	129707859'06729
49	7583'69846	99	69014978'76834	49	11388'93582	99	156946509'47142
50	9100'43815	100	82817974'52201	50	13780'61234	100	189905276'46042

TABLE I.

Amount of £1 in *n* years at the following rates per cent.

Years	22 per cent.	Years	22 per cent.	Years	23 per cent.	Years	23 per cent.
1	1'22	51	25371'80497	1	1'23	51	38473'41024
2	1'4884	52	30953'60207	2	1'5129	52	47322'29460
3	1'81585	53	37763'39452	3	1'86087	53	58206'42235
4	2'21553	54	46071'34132	4	2'28887	54	71593'89950
5	2'70271	55	56207'03641	5	2'81531	55	88060'49638
6	3'29730	56	68572'58441	6	3'46283	56	108314'41055
7	4'02271	57	83658'55299	7	4'25928	57	133226'72497
8	4'90771	58	102060'43464	8	5'23891	58	163868'87172
9	5'98740	59	124517'39026	9	6'44386	59	201558'71221
10	7'30463	60	151911'21612	10	7'92595	60	247917'21602
11	8'91165	61	185331'68367	11	9'74891	61	304938'17571
12	10'87221	62	226104'65408	12	11'99116	62	375073'95612
13	13'26410	63	275847'67797	13	14'74913	63	461340'96603
14	16'18220	64	336534'16713	14	18'14143	64	567449'38821
15	19'74229	65	410571'68369	15	22'31396	65	697962'74750
16	24'08559	66	500897'45435	16	27'44617	66	858494'17943
17	29'38442	67	611094'89431	17	33'75859	67	1055947'84070
18	35'84899	68	745535'77105	18	41'52331	68	1298815'84406
19	43'73577	69	909553'64069	19	51'07368	69	1597543'48819
20	53'35764	70	1109655'44164	20	62'82062	70	1964978'49048
21	65'09632	71	1353779'63880	21	77'26936	71	2416923'54329
22	79'41751	72	1651611'15933	22	95'04132	72	2972815'95824
23	96'88936	73	2014965'61439	23	116'90082	73	3656563'62864
24	118'20502	74	2458258'04955	24	143'78801	74	4497573'26322
25	144'21013	75	2999074'82045	25	176'85925	75	5532015'11376
26	175'93636	76	3658871'28095	26	217'53688	76	6804378'58993
27	214'64226	77	4463822'96276	27	267'57036	77	8369385'66561
28	261'86368	78	5445864'01457	28	329'11155	78	10294344'36870
29	319'47368	79	6643954'09778	29	404'80720	79	12662043'59351
30	389'75789	80	8105623'99929	30	497'91286	80	15574313'59541
31	475'50463	81	9888861'27913	31	612'43282	81	19156405'72236
32	580'11565	82	12064410'76054	32	753'29237	82	23562379'03850
33	707'74109	83	14718581'12786	33	926'54961	83	28981726'21735
34	863'44413	84	17956668'97599	34	1139'65602	84	35647523'24734
35	1053'40184	85	21907136'15071	35	1401'77690	85	43846453'99423
36	1285'15025	86	26726706'10386	36	1724'18559	86	53931137'92091
37	1567'88330	87	3260651'44671	37	2120'74828	87	66335299'64272
38	1912'81763	88	39780029'36499	38	2608'52038	88	81592418'56054
39	2333'63751	89	48531635'82529	39	3208'48007	89	100358674'82947
40	2847'03776	90	59208595'70685	40	3946'43049	90	123441170'04024
41	3473'38607	91	72234486'76236	41	4854'10950	91	151832639'14950
42	4237'53100	92	88126073'85007	42	5970'55469	92	186754146'15388
43	5169'78782	93	107513810'09709	43	7343'78226	93	229707599'76928
44	6307'14114	94	131166848'31845	44	9032'85218	94	282540347'71621
45	7694'71219	95	160023554'94851	45	11110'40819	95	347524627'69094
46	9387'54887	96	195228737'03718	46	13665'80207	96	427455292'05986
47	11452'80963	97	238179059'18536	47	16808'93654	97	525770009'23362
48	13972'42774	98	290578452'20614	48	20674'99195	98	646697111'35736
49	17046'36185	99	354505711'69149	49	25430'24010	99	795437446'96955
50	20796'56145	100	432496968'26362	50	31279'19532	100	978388059'77254

Amount of £1 in n years at the following rates per cent.

Years	24 per cent.	Years	24 per cent.	Years	25 per cent.	Years	25 per cent.
1	1'24	51	58144'13892	1	1'25	51	87581'15402
2	1'5376	52	72098'73226	2	1'5625	52	109476'44253
3	1'90662	53	89402'42801	3	1'95313	53	136845'55316
4	2'36421	54	110859'01073	4	2'44141	54	171056'94145
5	2'93163	55	137465'17330	5	3'05176	55	213821'17681
6	3'63522	56	170456'81489	6	3'81470	56	267276'47101
7	4'50767	57	211366'45047	7	4'76837	57	334095'58876
8	5'58951	58	262094'39858	8	5'96046	58	417619'48595
9	6'93099	59	324997'05424	9	7'45058	59	522024'35744
10	8'59443	60	402996'34726	10	9'31323	60	652530'44680
11	10'65709	61	499715'47060	11	11'64153	61	815663'05850
12	13'21479	62	619647'18355	12	14'55192	62	1019578'82312
13	16'38634	63	768362'50760	13	18'18989	63	1274473'52891
14	20'31906	64	952769'50942	14	22'73737	64	1593091'91113
15	25'19563	65	1181434'19168	15	28'42171	65	1991364'88892
16	31'24259	66	1464978'39769	16	35'52714	66	2489206'11114
17	38'74081	67	1816573'21313	17	44'40892	67	3111507'63893
18	48'03860	68	2252550'78428	18	55'51115	68	3889384'54866
19	59'56786	69	2793162'97251	19	69'38894	69	4861730'68583
20	73'86415	70	3463522'08591	20	86'73617	70	6077163'35729
21	91'59155	71	4294767'38653	21	108'42022	71	7596454'19661
22	113'57352	72	5325511'55930	22	135'52527	72	9495567'74576
23	140'83116	73	6603634'33353	23	169'40659	73	11869459'68220
24	174'63064	74	8188506'57358	24	211'75824	74	14836824'60275
25	216'54199	75	10153748'15124	25	264'69780	75	18546030'75344
26	268'51207	76	12590647'70754	26	330'87225	76	23182538'44180
27	332'95497	77	15612403'15735	27	413'59031	77	28978173'05225
28	412'86416	78	19359379'91512	28	516'98788	78	36222716'31531
29	511'95156	79	24005631'09474	29	646'23485	79	45278395'39414
30	634'81993	80	29766982'55748	30	807'79357	80	56597994'24267
31	787'17672	81	36911058'37128	31	1009'74196	81	70747492'80334
32	976'09913	82	45769712'38038	32	1262'17745	82	88434366'00418
33	1210'36292	83	56754443'35168	33	1577'72181	83	110542957'50522
34	1500'85002	84	70375509'75608	34	1972'15226	84	138178696'88152
35	1861'05403	85	87265632'09754	35	2465'19033	85	172723371'10191
36	2307'70699	86	108209383'80094	36	3081'48791	86	215904213'87738
37	2861'55667	87	134179635'91317	37	3851'85989	87	269880267'34073
38	3548'33027	88	166382748'53233	38	4814'82486	88	337350334'18341
39	4399'92954	89	206314608'18009	39	6018'53108	89	421687917'72926
40	5455'91262	90	255830114'14331	40	7523'16385	90	527109897'16158
41	6765'33165	91	317229341'53771	41	9403'95481	91	658887371'45197
42	8389'01125	92	393364383'50676	42	11754'94351	92	823609214'31497
43	10402'37395	93	487771835'54838	43	14693'67939	93	1029511517'89371
44	12898'94370	94	604837076'07999	44	18367'09923	94	1286889397'36713
45	15994'69019	95	749997974'33919	45	22958'87404	95	1608611746'70892
46	19833'41583	96	929997488'18060	46	28698'59255	96	2010764683'38615
47	24593'43563	97	1153196885'34394	47	35873'24069	97	2513455854'23268
48	30495'86018	98	1429964137'82648	48	44841'55086	98	3141819817'79085
49	37814'86662	99	1773155530'90484	49	56051'93857	99	3927274772'23857
50	46890'43461	100	2198712858'32200	50	70064'92322	100	4909093465'29821

## TABLE II.

**E**





TABLE II.

Amount of £1 in  $n$  years at the rate of 3 per cent. Payable by half-yearly and quarterly instalments.

Years	Amount of £1 in $n$ years at 3 per cent. Payable half-yearly. Ratio = 0'015	Amount of £1 in $n$ years at 3 per cent. Payable quarterly. Ratio = 0'0075	Years	Years	Amount of £1 in $n$ years at 3 per cent. Payable half-yearly. Ratio = 0'015	Amount of £1 in $n$ years at 3 per cent. Payable quarterly. Ratio = 0'0075	Years
0½	... ..	1'0075000000	0½	1	... ..	1'4858942602	1
1	1'0150000000	1'0150562500	1	1½	1'4948001774	1'4970384672	1½
1½	1'0226691719	1'0226691719	1½	2	1'5082662557	1'5082662557	2
2	1'0302250000	1'0303391907	2	2½	1'5172221801	1'5195782526	2½
2½	1'0380667346	1'0380667346	2½	3	1'524574027	1'5309750895	3
3	1'0456783750	1'0458522351	3	3½	1'5399805128	1'5424574027	3½
3½	1'0536961269	1'0536961269	3½	4	1'5540258332	1'5540258332	4
4	1'0613635506	1'0615988478	4	4½	1'5630802205	1'5656810269	4½
4½	1'0695608392	1'0695608392	4½	5	1'5774236346	1'5774236346	5
5	1'0772840039	1'0775825455	5	5½	1'5865264238	1'5892543119	5½
5½	1'0856644146	1'0856644146	5½	6	1'6011737192	1'6011737192	6
6	1'0934432639	1'0938068977	6	6½	1'6103243202	1'6131825221	6½
6½	1'1020104494	1'1020104494	6½	7	1'6252813911	1'6252813911	7
7	1'1098449129	1'1102755278	7	7½	1'6344791850	1'6374710015	7½
7½	1'1186025942	1'1186025942	7½	8	1'6497520340	1'6497520340	8
8	1'1264925866	1'1269921137	8	8½	1'6621251743	1'6621251743	8½
8½	1'1354445545	1'1354445545	8½	9	1'6745911131	1'6745911131	9
9	1'1433899754	1'1439603887	9	9½	1'6838813183	1'6871505464	9½
9½	1'1525400916	1'1525400916	9½	10	1'6998041755	1'6998041755	10
10	1'1605408250	1'1611841423	10	10½	1'7125527068	1'7125527068	10½
10½	1'1698930234	1'1698930234	10½	11	1'7253968521	1'7253968521	11
11	1'1779489374	1'1786672210	11	11½	1'7347766312	1'7383373285	11½
11½	1'1875072252	1'1875072252	11½	12	1'7513748585	1'7513748585	12
12	1'1956181715	1'1964135294	12	12½	1'7607982806	1'7645101699	12½
12½	1'2053866309	1'2053866309	12½	13	1'7777439962	1'7777439962	13
13	1'2135524440	1'2144270306	13	13½	1'7872102548	1'7910770762	13½
13½	1'2235352333	1'2235352333	13½	14	1'8045101542	1'8045101542	14
14	1'2317557307	1'2327117476	14	14½	1'8180439804	1'8180439804	14½
14½	1'2419570857	1'2419570857	14½	15	1'8316793102	1'8316793102	15
15	1'2502320667	1'2512717638	15	15½	1'8454169051	1'8454169051	15½
15½	1'2606563021	1'2606563021	15½	16	1'8592575319	1'8592575319	16
16	1'2689855477	1'2701112243	16	16½	1'8732019633	1'8732019633	16½
16½	1'2796370585	1'2796370585	16½	17	1'8872509781	1'8872509781	17
17	1'2892343364	1'2892343364	17	17½	1'9014053604	1'9014053604	17½
17½	1'2989035940	1'2989035940	17½	18	1'9156659006	1'9156659006	18
18	1'3073406358	1'3086453709	18	18½	1'9300333949	1'9300333949	18½
18½	1'3184602112	1'3184602112	18½	19	1'9445086453	1'9445086453	19
19	1'3269507454	1'3283486628	19	19½	1'9590924602	1'9590924602	19½
19½	1'3383112778	1'3383112778	19½	20	1'9737856536	1'9737856536	20
20	1'3468550065	1'3483486123	20	20½	1'9885890460	1'9885890460	20½
20½	1'3584612269	1'3584612269	20½	21	2'0035034639	2'0035034639	21
21	1'3670578316	1'3686496861	21	21½	2'0185297398	2'0185297398	21½
21½	1'3789145588	1'3789145588	21½	22	2'0336687129	2'0336687129	22
22	1'3892564180	1'3892564180	22	22½	2'0489212282	2'0489212282	22½
22½	1'3996758411	1'3996758411	22½	23	2'0642881375	2'0642881375	23
23	1'4083771546	1'4101734099	23	23½	2'0797702985	2'0797702985	23½
23½	1'4207497105	1'4207497105	23½	24	2'0953685757	2'0953685757	24
24	1'4314053333	1'4314053333	24	24½	2'110838400	2'110838400	24½
24½	1'4421408733	1'4421408733	24½	25	2'1269169688	2'1269169688	25
25	1'4509453541	1'4529569299	25	25½	2'1428688461	2'1428688461	25½
25½	1'4638541068	1'4638541068	25½	26	2'1589403625	2'1589403625	26
26	1'4727095344	1'4748330126	26	26½	2'1751324152	2'1751324152	26½

Amount of £1 in  $n$  years at the rate of 3 per cent. Payable by half-yearly and quarterly instalments.

Years	Amount of £1 in $n$ years at 3 per cent. Payable half-yearly. Ratio = 0'015	Amount of £1 in $n$ years at 3 per cent. Payable quarterly. Ratio = 0'0075	Years	Years	Amount of £1 in $n$ years at 3 per cent. Payable half-yearly. Ratio = 0'015	Amount of £1 in $n$ years at 3 per cent. Payable quarterly. Ratio = 0'0075	Years
27	2'2014064734	2'1914459083	27	40	3'2420323025	3'2320167709	40
28	2'2344275705	2'2078817526	28	41	3'2906627870	3'2562568967	41
29	2'2679439840	2'2244408657	29	42	3'3400227288	3'2806788235	42
30	2'3019631438	2'2411241727	30	43	3'3901230697	3'3052839146	43
31	2'3364925909	2'2579326035	31	44	3'4409749158	3'3300735440	44
32	2'3715399798	2'2748670080	32	45	3'4925894395	3'3550490956	45
33	2'4071130795	2'2919286013	33	46	3'5449783826	3'3802119638	46
34	2'4432197757	2'3091180658	34	47	3'5981530583	3'4055635535	47
35	2'4798680723	2'3264364513	35	48	3'6521253542	3'4311052802	48
36	2'5170660934	2'3438847247	36	49	3'7069072345	3'4568385698	49
37	2'5548220848	2'3614638601	37	50	3'7625108430	3'4827648590	50
38	2'5931444161	2'3791748391	38	51	3'8189485057	3'5088855955	51
39	2'6320415823	2'3970186504	39	52	3'8762327333	3'5352022375	52
	2'6715222061	2'4149962902			3'9343762243	3'5617162452	
	2'7115950391	2'4331087624			3'9933918676	3'5884291261	
	2'7522689647	2'4513570781			4'0532927457	3'6153423446	
	2'7935529992	2'4697422562			4'1140921368	3'6424574122	
	2'8354562942	2'4882653231			4'1758035189	3'6697758428	
	2'8779881386	2'5069273131			4'2384405717	3'6972991616	
	2'9211579607	2'5257292679			4'3020171803	3'7250280953	
	2'9649753301	2'5446722374			4'3665474380	3'7529666221	
	3'0094499600	2'5637572792			4'4320456495	3'7811138717	
	3'0545917094	2'5829854588			4'4985263343	3'8094722258	
	3'1004105851	2'6023578497			4'5577041108	3'8380432675	
	3'1469167439	2'6218755336			4'6263260433	3'8668285920	
	3'1941204950	2'6415396001			4'6959811648	3'8958298064	
		2'6613511471			4'7312010235	3'9250485300	
		2'6813112807				3'9544863939	
		2'7014211153				3'9841450419	
		2'7216817737				4'0140261297	
		2'7420943870				4'0441313257	
		2'7626600949				4'0744623106	
		2'7833800456				4'1050207780	
		2'8042553959				4'1358084338	
		2'8252873114				4'1668269971	
		2'8464769662				4'1980781995	
		2'8678255435				4'2295637860	
		2'8893342351				4'2612855144	
		2'9110042418				4'2932451558	
		2'9328367736				4'3254444944	
		2'9548330494				4'3578853282	
		2'9769942973				4'3905694681	
		2'9993217545				4'4234987391	
		3'0218166677				4'4566749797	
		3'0444802927				4'4901000420	
		3'0673138949				4'5237757923	
		3'0903187491				4'5577041108	
		3'1134961397				4'5918868916	
		3'1368473608				4'6263260433	
		3'1603737160				4'6610234886	
		3'1840765189				4'6959811648	
		3'2079570928				4'7312010235	

Amount of £1 in  $n$  years at the rate of 3 per cent. Payable by half-yearly and quarterly instalments.

Years	Amount of £1 in $n$ years at 3 per cent. Payable half-yearly. Ratio = 0.005	Amount of £1 in $n$ years at 3 per cent. Payable quarterly. Ratio = 0.0075	Years	Years	Amount of £1 in $n$ years at 3 per cent. Payable half-yearly. Ratio = 0.015	Amount of £1 in $n$ years at 3 per cent. Payable quarterly. Ratio = 0.0075	Years
53	4'7745718827	4'7666850312	53	65	6'8252639321	6'8230583759	65
54	4'8461904610	4'8024351689	54	66	6'9276428911	6'8742313137	66
55	4'9188833179	4'8384534327	55	67	7'0315575345	6'9257880485	67
56	4'9926665676	4'8747418334	56	68	7'1370308975	6'9777314589	68
57	5'0675565662	4'9113023972	57	69	7'2440863609	7'0300644449	69
58	5'1435699146	4'9481371652	58	70	7'3527476563	7'0827899282	70
59	5'2207234634	4'9852481939	59	71	7'4630388712	7'1359108527	71
60	5'2990343153	5'0263755554	60	72	7'5749844543	7'1894301840	72
61	5'3785198300	5'0603073370	61	73	7'6886092211	7'2433509104	73
62	5'4591976275	5'0982596421	62	74	7'8039383594	7'2976760423	74
63	5'5410855919	5'1364965894	63	75	7'9209974348	7'3524086126	75
64	5'6242018758	5'1750203138	64	76	8'0398123963	7'4075516772	76
65	5'7085649039	5'2138329661	65	77	8'1604095822	7'4631083147	77
66	5'7941933775	5'2529367134	66	78	8'2828157260	7'5190816271	78
67	5'8811062781	5'2923337387	67	79	8'4070579619	7'5754747393	79
68	5'9693228723	5'3320262418	68	80	8'5331638313	7'6322907999	80
69	6'0588627154	5'3720164386	69	81	8'6611612888	7'6895329809	81
70	6'1497456561	5'4123065619	70	82	8'7965211377	7'7472044782	82
71	6'2419918410	5'4528988611	71	83	8'9229448887	7'8053085118	83
72	6'3356217186	5'4937956026	72	84	9'0567890621	7'8638483256	84
73	6'4306560444	5'5349990696	73	85	9'1926408980	7'9228271881	85
74	6'5271158850	5'5765115626	74	86	9'3305305115	7'9822483920	86
75	6'6250226233	5'6183353993	75	87	9'4704884691	8'0421152549	87
76	6'7243979627	5'6604729148	76	88	9'6125457962	8'1024311193	88
77		5'7029264617	77	89		8'1631993527	81
78		5'7456984101	78	90		8'2244233479	82
79		5'7887911482	79	91		8'2861065230	83
80		5'8322070818	80	92		8'3482523219	84
81		5'8759486349	81	93		8'4108642143	85
82		5'9200182497	82	94		8'4739456959	86
83		5'9644183866	83	95		8'5375002886	87
84		6'0091515245	84	96		8'6015315408	88
85		6'0542201609	85	97		8'6660430274	89
86		6'0996268121	86	98		8'7310383501	90
87		6'1453740132	87	99		8'7965211377	91
88		6'1914643183	88	100		8'8624950462	92
89		6'2379003007	89			8'9289637591	93
90		6'2846845529	90			8'9959309873	94
91		6'3318196871	91			9'0634004697	95
92		6'3793083347	92			9'1313759732	96
93		6'4271531473	93			9'1998612930	97
94		6'4753567959	94			9'2688602527	98
95		6'5239219718	95			9'3383767046	99
96		6'5728513866	96			9'4084145299	100
97		6'6221477720	97			9'4789776389	
98		6'6718138803	98			9'5500699711	
99		6'7218524844	99			9'6216954959	
100		6'7722663780	100			9'6938582121	

Amount of £1 in  $n$  years at the rate of 3 per cent. Payable by half-yearly and quarterly instalments.

Years	Amount of £1 in $n$ years at 3 per cent. Payable half-yearly. Ratio = 0.015	Amount of £1 in $n$ years at 3 per cent. Payable quarterly. Ratio = 0.0075	Years	Years	Amount of £1 in $n$ years at 3 per cent. Payable half-yearly. Ratio = 0.015	Amount of £1 in $n$ years at 3 per cent. Payable quarterly. Ratio = 0.0075	Years
77	97567339831	97665621487	77	89	141564878441	142968221111	89
78	102024057368	1022040887089	78	90	145843676891	147305761230	90
79	105107734502	106032089775	79	91	150251802025	151774898806	91
80	108284615777	109249017563	80	92	154793162742	156379626399	92
81	111557518289	112563544337	81	93	159471786086	161124057700	93
82	113230881063	114258329201	82	94	161863862877	163549981704	94
83	114929344279	115978631170	83	95	166756198132	169775795544	95
84	120179129965	121296510634	84	96	171796404221	173624472233	96
85	125668717331	126858226757	85	97	179643784796	181585542354	97
86	129467054313	130707002685	86	98	185073518192	187094700745	98
87	133380196029	134672547361	87	99	190667365279	192771002543	99
88	137411612454	138758403453	88	100	196430286395	198619518744	100

### TABLE III.



TABLE III.

Amount of £1 per annum in  $n$  years at the following rates per cent.

Years	% per cent.	Years	% per cent.	Years	% per cent.	Years	% per cent.
1	1	51	57.9283888021	1	1	51	61.8472142443
2	2.005	52	59.2180307461	2	2.0075	52	63.3110683512
3	3.015025	53	60.5141208998	3	3.02255625	53	64.7859013638
4	4.030100125	54	61.8166915043	4	4.0452254219	54	66.2717956241
5	5.0502506256	55	63.1257749619	5	5.0755646125	55	67.7688340912
6	6.0755018788	56	64.4414038367	6	6.1136313471	56	69.2771003469
7	7.1058793881	57	65.7636108559	7	7.1594835822	57	70.7966785995
8	8.1414087851	58	67.0924289101	8	8.2131797091	58	72.3276536890
9	9.1821158290	59	68.4278910547	9	9.2741755569	59	73.8701110917
10	10.2280264082	60	69.7700305100	10	10.3443393961	60	75.4241369249
11	11.2791665402	61	71.1188806625	11	11.4219219416	61	76.9898179518
12	12.3355623729	62	72.4744750658	12	12.5075863561	62	78.5672415865
13	13.3972401848	63	73.8368474412	13	13.6013932538	63	80.1564958984
14	14.4642263857	64	75.2060316784	14	14.7034037032	64	81.7576696176
15	15.5365475176	65	76.5820618368	15	15.8136792310	65	83.3708521398
16	16.6142302552	66	77.9649721460	16	16.9322818252	66	84.9961335308
17	17.6973014065	67	79.3547970067	17	18.0592739389	67	86.6336045323
18	18.785789135	68	80.7515709917	18	19.1947184934	68	88.2833565663
19	19.8797168531	69	82.1553288467	19	20.3386788821	69	89.9454817406
20	20.9791154374	70	83.5661054909	20	21.4912189738	70	91.6200728536
21	22.0840110146	71	84.9839360184	21	22.6524031161	71	93.3072234000
22	23.1944310696	72	86.4088556985	22	23.8222961394	72	95.0070275755
23	24.3104032250	73	87.8408999770	23	25.0000633605	73	96.7195802824
24	25.4319552411	74	89.2801044769	24	26.1884705857	74	98.4449771345
25	26.5591150173	75	90.7265049993	25	27.3848841151	75	100.1831446630
26	27.6919105924	76	92.1801375243	26	28.5902707459	76	101.9346893215
27	28.8303701454	77	93.6410382119	27	29.8046977765	77	103.6991994914
28	29.9745219061	78	95.1092434030	28	31.0282330098	78	105.4769434876
29	31.1243946061	79	96.5847896200	29	32.2609447574	79	107.2680205637
30	32.2800165791	80	98.0677135681	30	33.5029018431	80	109.0725307180
31	33.4414166620	81	99.5580521359	31	34.7541736069	81	110.8905746984
32	34.6086237453	82	101.0558423966	32	36.0148299090	82	112.7222540086
33	35.7816668640	83	102.5611216086	33	37.2849411333	83	114.5676709137
34	36.9605751984	84	104.0739272166	34	38.5645781918	84	116.4269284455
35	38.1453780744	85	105.5952968527	35	39.8538125282	85	118.3001304089
36	39.3361049647	86	107.1222683370	36	41.1527161216	86	120.1873813869
37	40.5327854896	87	108.6578796787	37	42.4613614925	87	122.0887867473
38	41.7354494170	88	110.2011690771	38	43.7798217037	88	124.004526480
39	42.9441266641	89	111.7521749224	39	45.1081703665	89	125.9344860428
40	44.1588472974	90	113.3109357971	40	46.4464816442	90	127.8789946881
41	45.3796415339	91	114.8774904760	41	47.7948302566	91	129.8380871483
42	46.6065397416	92	116.4518779284	42	49.1532914835	92	131.8118728019
43	47.8395724403	93	118.0341373181	43	50.5219411696	93	133.8004618479
44	49.0787703025	94	119.6243080047	44	51.9008557284	94	135.8039653118
45	50.3241641540	95	121.2224295447	45	53.2901121464	95	137.8224950517
46	51.5757849748	96	122.8285416924	46	54.6897879875	96	139.8561637645
47	52.8336638996	97	124.4426844009	47	56.0999613974	97	141.9050849928
48	54.0978322191	98	126.0648978229	48	57.52977111079	98	143.9693731302
49	55.3683213802	99	127.6952223120	49	58.9521164412	99	146.0491434287
50	56.6451629871	100	129.3336984235	50	60.3942573145	100	148.1445120044



Amount of £1 per annum in n years at the following rates per cent.

Years	1 per cent.	Years	1 per cent.	Years	1½ per cent.	Years	1½ per cent.
1	1*	51	66·1078140061	1	1*	51	70·7428122595
2	2·01	52	67·7688921462	2	2·0125	52	72·6270974128
3	3·0 01	53	69·4465810676	3	3·03765625	53	74·5349361304
4	4·060401	54	71·1410468783	4	4·0756269531	54	76·4666228320
5	5·10100501	55	72·8524573471	5	5·1265722900	55	78·4224556174
6	6·1520150601	56	74·5809819206	6	6·1906544437	56	80·4027363127
7	7·2135352107	57	76·3267917398	7	7·2680376242	57	82·4077705166
8	8·2856705628	58	78·0900596571	8	8·3588880945	58	84·4378676480
9	9·3685272684	59	79·8709602537	9	9·4633741957	59	86·4933409936
10	10·4622125411	60	81·6696698563	10	10·5816663731	60	88·5745077560
11	11·5668346665	61	83·4863665548	11	11·7139372028	61	90·6816891030
12	12·6825030132	62	85·3212302204	12	12·8603614178	62	92·8152102168
13	13·8093280433	63	87·1744425226	13	14·0211159356	63	94·9754003445
14	14·9474213238	64	89·0461869478	14	15·1963798848	64	97·1625928488
15	16·0968955370	65	90·9366488173	15	16·3863346333	65	99·3771252594
16	17·2578644924	66	92·8460153054	16	17·5911638162	66	101·6193393252
17	18·4304431373	67	94·7744754585	17	18·8110533639	67	103·8895810667
18	19·6147475687	68	96·7222202131	18	20·0461915310	68	106·1882008300
19	20·8108950443	69	98·6894424152	19	21·2967689251	69	108·5155533404
20	22·0190039948	70	100·6763368393	20	22·5629785367	70	110·8719977572
21	23·2391940347	71	102·6831002077	21	23·8450157684	71	113·2578977291
22	24·4715859751	72	104·7099312098	22	25·1430784655	72	115·6736214508
23	25·7163018348	73	106·7570305219	23	26·4573669403	73	118·1195417189
24	26·9734648532	74	108·8246008271	24	27·7880840331	74	120·5960359904
25	28·2431995017	75	110·9128468354	25	29·1354350836	75	123·1034864403
26	29·5256314967	76	113·0219753037	26	30·4996280221	76	125·6422800208
27	30·8208878117	77	115·1521950568	27	31·8808733724	77	128·2128085210
28	32·1290966898	78	117·3037170074	28	33·2793842895	78	130·8154686275
29	33·4503876567	79	119·4767541774	29	34·6953765932	79	133·4506619854
30	34·7848915333	80	121·6715217192	30	36·1290688006	80	136·1187952602
31	36·1327404486	81	123·8882369364	31	37·5806821606	81	138·8202802010
32	37·4940678531	82	126·1271193058	32	39·0504406876	82	141·5555337035
33	38·8690085316	83	128·3883904988	33	40·5385711962	83	144·3249778748
34	40·2576986169	84	130·6722744038	34	42·0453033361	84	147·1290400982
35	41·6602756031	85	132·97809971478	35	43·5708696278	85	149·9681530994
36	43·0768783591	86	135·3087871193	36	45·1155054982	86	152·8427550132
37	44·5076471427	87	137·66187449905	37	46·6794493169	87	155·7532894508
38	45·9527236141	88	140·0384847404	38	48·2629424334	88	158·7002055690
39	47·4122508503	89	142·4388786778	39	49·8662292138	89	161·6839581386
40	48·8863733588	90	144·8632674646	40	51·4895570789	90	164·7050076153
41	50·3752370923	91	147·3119001393	41	53·1331765424	91	167·7638202105
42	51·8789894633	92	149·7850191406	42	54·7973412492	92	170·8608679631
43	53·3977793579	93	152·2828693321	43	56·4823080148	93	173·9966288127
44	54·9317571515	94	154·8056980254	44	58·1883368650	94	177·1715866728
45	56·4810747230	95	157·3537550056	45	59·9156910758	95	180·3862315062
46	58·0458854702	96	159·9272925557	46	61·6646372143	96	183·6410594001
47	59·6263443249	97	162·5265654812	47	63·4345451794	97	186·9365726426
48	61·2226077681	98	165·1518311361	48	65·2283882442	98	190·2732798006
49	62·8348338458	99	167·8033494474	49	67·0437430972	99	193·6516957981
50	64·4631821843	100	170·4813829419	50	68·8817898859	100	197·0723419956

Amount of £1 per annum in *n* years at the following rates per cent.

Years	1½ per cent.	Years	1½ per cent.	Years	1½ per cent.	Years	1½ per cent.
1	1'	51	75'7880704611	1	1'	51	81'2830136099
2	2'015	52	77'9248915180	2	2'0175	52	83'7054663481
3	3'045225	53	80'0937648907	3	3'05280625	53	86'1703120092
4	4'090903375	54	82'2951713641	4	4'1062343594	54	88'6782924693
5	5'1522669256	55	84'5295989346	5	5'1780893907	55	91'2301625875
6	6'2295509295	56	86'7975429186	6	6'2687059550	56	93'8266904328
7	7'3229941935	57	89'0995060624	7	7'3784083092	57	96'4686575154
8	8'4328391064	58	91'4359986533	8	8'5075304546	58	99'15685900219
9	9'5593316922	59	93'8075386331	9	9'6564123376	59	101'8921040548
10	10'7027216683	60	96'2146517126	10	10'8253994517	60	104'6752158758
11	11'8632624934	61	98'6578714883	11	12'0148439241	61	107'5070321536
12	13'0412114308	62	101'1377395606	12	13'2251037111	62	110'3884052163
13	14'2368296022	63	103'6548056540	13	14'4565430261	63	113'3202023076
14	15'4503820463	64	106'2096277388	14	15'7095325290	64	116'3033058480
15	16'682137770	65	108'8027721549	15	16'9844493483	65	119'3386137003
16	17'9323698436	66	111'4348137372	16	18'2816772119	66	122'4270394401
17	19'2013553913	67	114'1063359433	17	19'6016065631	67	125'5695126303
18	20'4893757221	68	116'8179309824	18	20'9446346780	68	128'7669791013
19	21'7967163580	69	119'5701999472	19	22'3111657848	69	132'0204012356
20	23'1236671033	70	122'3637529464	20	23'7016111861	70	135'3307582572
21	24'4705221099	71	125'1992092406	21	25'1163893818	71	138'6990465267
22	25'8375799415	72	128'0771973792	22	26'5559261960	72	142'1262798409
23	27'2251436406	73	130'9983553399	23	28'0206549044	73	145'6134897381
24	28'6335207953	74	133'9633306700	24	29'5110163653	74	149'1617258086
25	30'0630236072	75	136'9727806300	25	31'0274591517	75	152'7720560102
26	31'5139689613	76	140'0273723395	26	32'5704396868	76	156'4455669904
27	32'9866784957	77	143'1277829246	27	34'1404223813	77	160'1833644137
28	34'4814786731	78	146'2746996684	28	35'7378797730	78	163'9865732910
29	35'9987008532	79	149'4688201635	29	37'3632926691	79	167'8563383235
30	37'5386813660	80	152'7108524659	30	39'0171502908	80	171'7938242442
31	39'1017615865	81	156'0015152529	31	40'6999504209	81	175'8002161684
32	40'6882880103	82	159'3415379817	32	42'4121995532	82	179'8767199514
33	42'2986123305	83	162'71316610514	33	44'1544130454	83	184'0245624505
34	43'9330915154	84	166'1726359672	34	45'9271152737	84	188'2449923951
35	45'5920878882	85	169'6652255067	35	47'7308397910	85	192'5392797620
36	47'2759692065	86	173'2102038893	36	49'5661294873	86	196'9087171579
37	48'9851087446	87	176'8083569476	37	51'4335367534	87	201'3546197081
38	50'7198853757	88	180'4604823018	38	53'3336236466	88	205'8783255530
39	52'4806836564	89	184'1673895364	39	55'2669620604	89	210'4811962502
40	54'2678939112	90	187'9299003794	40	57'2341338964	90	215'1646171846
41	56'0819123199	91	191'7488488851	41	59'2357312396	91	219'9299979853
42	57'9231410047	92	195'6250816184	42	61'2723565363	92	224'7787729500
43	59'7919881198	93	199'5594578427	43	63'3446227757	93	229'7124014766
44	61'6888679416	94	203'5528497103	44	65'4531536743	94	234'7323685025
45	63'6142009607	95	207'6061424560	45	67'5985838636	95	239'8401849513
46	65'5684139751	96	211'7202345928	46	69'7815590812	96	245'0373881879
47	67'5519401847	97	215'8603811117	47	72'0027363651	97	250'3255424812
48	69'5652192875	98	220'1344786834	48	74'2627842515	98	255'7062394746
49	71'6086975768	99	224'4364958636	49	76'5623829759	99	261'1810986654
50	73'6828280405	100	228'8030433016	50	78'9022246780	100	266'7517678920

Amount of £1 per annum in *n* years at the following rates per cent.

Years	2 per cent.	Years	2 per cent.	Years	2½ per cent.	Years	2½ per cent.
1	1'	51	87'2709894828	1	1'	51	93'7996641635
2	2'02	52	90'0164092724	2	2'0225	52	96'9101566072
3	3'0604	53	92'8167374579	3	3'06800625	53	100'0906351308
4	4'121608	54	95'6730722070	4	4'1370363906	54	103'3426744213
5	5'20404016	55	98'5865336512	5	5'2301197094	55	106'6678845958
6	6'3081209632	56	101'5582643242	6	6'3477974029	56	110'0679119992
7	7'4342833825	57	104'5894296107	7	7'4906228444	57	113'5444400192
8	8'5829690501	58	107'6812182029	8	8'6591618584	58	117'0991899196
9	9'7546284311	59	110'8348425670	9	9'8539930003	59	120'7339216928
10	10'9497209997	60	114'0515394183	10	11'0757078428	60	124'4504349309
11	12'1687154197	61	117'3325702067	11	12'3249112692	61	128'2505697168
12	13'4120897281	62	120'6792216108	12	13'6022217728	62	132'1362075354
13	14'6803315267	63	124'0928060430	13	14'9082717627	63	136'1092722050
14	15'9739381531	64	127'5746621639	14	16'2437078773	64	140'1717308296
15	17'2934169162	65	131'1261554073	15	17'6091913046	65	144'3255947733
16	18'6392852545	66	134'7486785154	16	19'0053981089	66	148'5729206557
17	20'0120709596	67	138'4436520857	17	20'4330195664	67	152'9158113704
18	21'4123123788	68	142'2125251275	18	21'8927625066	68	157'3564171262
19	22'8405586264	69	146'0567756300	19	23'3853496630	69	161'8969365116
20	24'2973697989	70	149'9779111426	20	24'9115200304	70	166'5396175831
21	25'7833171949	71	153'9774693655	21	26'4720292311	71	171'2867589787
22	27'3989835388	72	158'0570187528	22	28'0676498888	72	176'1407110557
23	28'8449632006	73	162'2181591278	23	29'6991720113	73	181'1038770545
24	30'4218624738	74	166'4625223104	24	31'3674033816	74	186'1787142882
25	32'0302997232	75	170'7917727566	25	33'0731699577	75	191'3677353597
26	33'6709057177	76	175'2076082117	26	34'8173162817	76	196'6735094053
27	35'3443238320	77	179'7117603759	27	36'6007258980	77	202'0986633669
28	37'0512103087	78	184'3059955835	28	38'4242217808	78	207'6458832927
29	38'7922345149	79	188'9921154951	29	40'2887667708	79	213'3179156667
30	40'5680792052	80	193'7719578050	30	42'1952640232	80	219'1175687692
31	42'3794407893	81	198'6473969611	31	44'1446574637	81	225'0477140666
32	44'2270296051	82	203'6203449003	32	46'1379122566	82	231'1112876331
33	46'1115701972	83	208'6927517984	33	48'1760152824	83	237'3112916048
34	48'0338016011	84	213'8666068343	34	50'2599756262	84	243'6507956659
35	49'9944776331	85	219'1439389710	35	52'3908250778	85	250'1329385684
36	51'9943671858	86	224'5268177504	36	54'5696186421	86	256'7609296862
37	54'0342545295	87	230'0173541054	37	56'7974350615	87	263'5380506041
38	56'1149396201	88	235'6177011875	38	59'0753773504	88	270'4676567427
39	58'2372384125	89	241'3300552113	39	61'4045733408	89	277'5531790194
40	60'4019831808	90	247'1566563155	40	63'7861762410	90	284'7981255474
41	62'6100228444	91	253'0997894418	41	66'2213652064	91	292'2060833722
42	64'8622233013	92	259'1617852306	42	68'7113459235	92	299'7807202481
43	67'1594677673	93	265'3450209353	43	71'2573512068	93	307'5257864536
44	69'5026571226	94	271'6519213540	44	73'8600416089	94	315'4451166489
45	71'8927102651	95	278'0849597810	45	76'5225060451	95	323'5426317735
46	74'3305644704	96	284'6466589766	46	79'2424624312	96	331'8223409884
47	76'8171757598	97	291'3395921562	47	82'0272853359	97	340'2883436606
48	79'3535192750	98	298'1663839993	48	84'8728716484	98	348'9448313930
49	81'9405896605	99	305'1297116793	49	87'7825112605	99	357'7960900993
50	84'5794014537	100	312'2323059129	50	90'7576177639	100	366'8465021265

TABLE III.

Amount of £1 per annum in  $n$  years at the following rates per cent.

Years	2½ per cent.	Years	2½ per cent.	Years	2½ per cent.	Years	2½ per cent.
1	1	51	100.9214575078	1	1	51	108.6940225574
2	2.025	52	104.4444939455	2	2.0275	52	112.6831081777
3	3.075625	53	108.0556062941	3	3.08325625	53	116.7818936526
4	4.152515625	54	111.7569964515	4	4.1680457969	54	120.9933957281
5	5.2563285156	55	115.5509213628	5	5.2826670563	55	125.3207141106
6	6.3877367285	56	119.4396943968	6	6.4279404003	56	129.7670337486
7	7.5474301467	57	123.4256867568	7	7.6047087613	57	134.3356271767
8	8.7361159004	58	127.5113289257	8	8.8138382523	58	139.0298569241
9	9.9545187979	59	131.6991121488	9	10.0562188042	59	143.8531779855
10	11.2033817679	60	135.99915899525	10	11.3327648213	60	148.8091403842
11	12.4834663121	61	140.3913797014	11	12.6444158539	61	153.9013917448
12	13.7955529699	62	144.9011641939	12	13.9921372899	62	159.1336800177
13	15.1404417941	63	149.5236932987	13	15.3769210654	63	164.5098562182
14	16.5189528390	64	154.2617856312	14	16.7997863947	64	170.0338772642
15	17.9319266599	65	159.1183302720	15	18.2617805205	65	175.7098088890
16	19.3802248264	66	164.0962885288	16	19.7639794849	66	181.5418286334
17	20.8647304471	67	169.1986957420	17	21.3074889207	67	187.5342289209
18	22.3863487083	68	174.4286631356	18	22.8934448660	68	193.6914202162
19	23.9460074260	69	179.7893797139	19	24.5230145998	69	200.0179342721
20	25.5446576116	70	185.2841142068	20	26.1973975013	70	206.5184274646
21	27.1832740519	71	190.9162170620	21	27.9178259326	71	213.1976842199
22	28.8628559032	72	196.6891224885	22	29.6855661458	72	220.0606205359
23	30.5844273008	73	202.6063505507	23	31.5019192148	73	227.1122876008
24	32.3490379833	74	208.6715093145	24	33.3682219932	74	234.3578755098
25	34.1577639329	75	214.8882970474	25	35.2858480980	75	241.8027170863
26	36.0117080312	76	221.2605044735	26	37.2562089207	76	249.4522918062
27	37.9120007320	77	227.7920170854	27	39.2807546660	77	257.3122298308
28	39.8598007503	78	234.4868175125	28	41.3609754193	78	265.3883161511
29	41.8562957690	79	241.3489879503	29	43.4804222433	79	273.6864948452
30	43.9027031633	80	248.3827126491	30	45.6946083050	80	282.2128734535
31	46.0002707423	81	255.5922804653	31	47.9512100334	81	290.9737274734
32	48.1502775109	82	262.9820874770	32	50.2698683093	82	299.9755049789
33	50.3540344487	83	270.5566396639	33	52.6522896878	83	309.2248313659
34	52.6128853099	84	278.3205556555	34	55.1002276543	84	318.7285142284
35	54.9282074426	85	286.2785695469	35	57.6154839148	85	328.4935483697
36	57.3014126287	86	294.4355337855	36	60.1999097224	86	338.5271209499
37	59.7339479444	87	302.7964221302	37	62.8554072398	87	348.8366167760
38	62.2272966430	88	311.3663326834	38	65.5839309389	88	359.4296237373
39	64.7829790591	89	320.1504910005	39	68.3874890397	89	370.3139383901
40	67.4025535356	90	329.1542532755	40	71.2681449883	90	381.4975716958
41	70.0876173740	91	338.3831056074	41	74.2280189755	91	392.9887549174
42	72.8398078083	92	347.8426873476	42	77.2692894973	92	404.7959456777
43	75.6608030035	93	357.5387545313	43	80.3941949585	93	416.9278341838
44	78.5523230786	94	367.4772233946	44	83.6050353198	94	429.3933496238
45	81.5161311556	95	377.6641539794	45	86.9041737911	95	442.2016667385
46	84.5540344344	96	388.1057578289	46	90.2940385704	96	455.3622125738
47	87.6678852953	97	398.8084017747	47	93.7771246311	97	468.8846734196
48	90.8595824277	98	409.7786118190	48	97.3559555584	98	482.7790019386
49	94.1310719884	99	421.0230771145	49	101.0332854363	99	497.0554244919
50	97.4843487881	100	432.5486540424	50	104.8117007858	100	511.7244486654

Amount of £1 per annum in n years at the following rates per cent.

Years	3 per cent.	Years	3 per cent.	Years	3½ per cent.	Years	3½ per cent.
1	1'	51	117'1807733090	1	1'	51	136'5828370186
2	2'03	52	121'6961965083	2	2'035	52	142'3632363142
3	3'0909	53	126'34780824035	3	3'106225	53	148'3459495852
4	4'183627	54	131'1374948756	4	4'214942875	54	154'5380578206
5	5'30913581	55	136'0716197219	5	5'3624658746	55	160'9468898443
6	6'4684098843	56	141'1537683135	6	6'5501521813	56	167'5800309888
7	7'6624621808	57	146'3883813629	7	7'7794075076	57	174'4453320734
8	8'8923360463	58	151'7800328038	8	8'90516867704	58	181'5509186959
9	10'1591061276	59	157'3334337879	9	10'3684958073	59	188'9052008503
10	11'4638793115	60	163'0534368016	10	11'7313931606	60	196'5168828800
11	12'8077956908	61	168'9450399056	11	13'1419919212	61	204'3949737808
12	14'1920295615	62	175'0133911028	12	14'6019616385	62	212'5487978630
13	15'6177904484	63	181'2637928359	13	16'1130302958	63	220'9880057882
14	17'0863241618	64	187'7017066209	14	17'6769863562	64	229'7225859908
15	18'5989138867	65	194'3327578196	15	19'2956808786	65	238'7628765004
16	20'1568813033	66	201'1627405541	16	20'9710297094	66	248'1195771780
17	21'7615877424	67	208'1976227708	17	22'7050157492	67	257'8037623791
18	23'4144353747	68	215'4435514539	18	24'4996913004	68	267'8268940623
19	25'1168684359	69	222'9068579975	19	26'3571804960	69	278'2008353545
20	26'8703744890	70	230'5940637374	20	28'2796818133	70	288'9378645919
21	28'6764857237	71	238'5118856496	21	30'2694706768	71	300'0506898525
22	30'5367802954	72	246'6672422190	22	32'3289021505	72	311'5524639973
23	32'4528837042	73	255'0672594856	23	34'4604137267	73	323'4568002372
24	34'4264702154	74	263'7192772702	24	36'6665282071	74	335'7777882455
25	36'4592643218	75	272'6308555883	25	38'9498566944	75	348'5300108340
26	38'5530422515	76	281'8097812559	26	41'3131016786	76	361'7285612132
27	40'7096335190	77	291'2640746936	27	43'7590602373	77	375'3890608856
28	42'9309225246	78	301'0019969344	28	46'2906273456	78	389'5276779855
29	45'275502003	79	311'0302568424	29	48'9107993027	79	404'1611467150
30	47'5754157063	80	321'3630185477	30	51'6226772782	80	419'3067868500
31	50'0026781775	81	332'0039091041	31	54'4294709829	81	434'9825243897
32	52'5027585229	82	343'9640263773	32	57'3345024673	82	451'2069127433
33	55'0778412785	83	354'2529471686	33	60'3412100536	83	467'9991546893
34	57'7301765169	84	365'8805355836	34	63'4531524055	84	485'3791251034
35	60'4620818124	85	377'8569516512	35	66'6740127396	85	503'3673944820
36	63'2759442668	86	390'1926602007	36	70'0076031855	86	521'9852532888
37	66'1742225948	87	402'8984400067	37	73'4578692969	87	541'2547371539
38	69'1594492726	88	415'9853932069	38	77'0288947223	88	561'1986529543
39	72'2342327508	89	429'4649550031	39	80'7249063076	89	581'8406058076
40	75'4012597333	90	443'3489036532	40	84'5502777488	90	603'2050270109
41	78'6632975253	91	457'6493707628	41	88'5095374700	91	625'3172029562
42	82'0231964511	92	472'3788518857	42	92'6073712814	92	648'2033050596
43	85'4838923446	93	487'5502174423	43	96'8486292763	93	671'8904207367
44	89'0484091150	94	503'1767239655	44	101'2383313009	94	696'4065854624
45	92'7198613884	95	519'2720256845	45	105'7816728964	95	721'7808159536
46	96'5014572301	96	535'8501864550	46	110'4840314477	96	748'0431445119
47	100'3965009470	97	552'9256920487	47	115'3509725484	97	775'2246545698
48	104'4083995754	98	570'5134628101	48	120'3882565875	98	803'3575174797
49	108'5406478546	99	588'6288666944	49	125'6018455681	99	832'4750305915
50	112'7968672903	100	607'2877326953	50	130'9979101629	100	862'6116566622

TABLE III.

Amount of £1 per annum in n years at the following rates per cent.

Years	4 per cent.	Years	4 per cent.	Years	4½ per cent.	Years	4½ per cent.
1	1'	51	159'7737670032	1	1'	51	187'5356645512
2	2'04	52	167'1647176833	2	2'045	52	196'9747694560
3	3'1216	53	174'8513063906	3	3'137025	53	206'8386340816
4	4'246464	54	182'8453586462	4	4'278191125	54	217'1463726152
5	5'41632256	55	191'1591729921	5	5'4707097256	55	227'9179593829
6	6'6329754624	56	199'8055399118	6	6'7168916633	56	239'1742675552
7	7'8982944809	57	208'7977615082	7	8'0191517881	57	250'9371095951
8	9'2142262601	58	218'1496719686	8	9'3800136186	58	263'2292795269
9	10'5827953105	59	227'8756588473	9	10'8021142314	59	276'0745971056
10	12'0061071230	60	237'9906852012	10	12'2882093718	60	289'4979539754
11	13'4863514079	61	248'5103126092	11	13'8411787936	61	303'5253619043
12	15'0258054642	62	259'4507251136	12	15'4640318393	62	318'1840031900
13	16'6268376828	63	270'8287541182	13	17'1599132721	63	333'5022833335
14	18'2919111901	64	282'6619042829	14	18'9321093693	64	349'5098860835
15	20'0235876377	65	294'9683804542	15	20'7840542909	65	366'2378309573
16	21'8245311432	66	307'7671156724	16	22'7193367340	66	383'7185333503
17	23'6975123889	67	321'0778002993	17	24'7417068870	67	401'9858673511
18	25'6454128845	68	334'9209123112	18	26'8550836970	68	421'0752313819
19	27'6712293998	69	349'3177488037	19	29'0035624633	69	441'0236167941
20	29'7780785858	70	364'2904587558	20	31'3714227742	70	461'8696795498
21	31'9692017189	71	379'8620771061	21	33'7831367990	71	483'6538151296
22	34'2479697876	72	396'0565601903	22	36'3033779550	72	506'4182368104
23	36'6178885791	73	412'8988225979	23	38'9370299629	73	530'2070574669
24	39'0826041223	74	430'4147755018	24	41'6891963113	74	555'0663750529
25	41'6459082872	75	448'6313665219	25	44'5652101453	75	581'0443619302
26	44'3117446187	76	467'5766211828	26	47'5706446018	76	608'1913582171
27	47'0842144034	77	487'2796860301	27	50'7113236089	77	636'5599693369
28	49'9675829795	78	507'7708734713	28	53'9933317173	78	666'2051679570
29	52'9662862987	79	529'0817084102	29	57'4230331640	79	697'1844005151
30	56'0849377507	80	551'2449767466	30	61'0070696564	80	729'5576985383
31	59'3283352607	81	574'2947758164	31	64'7523877909	81	763'3877949725
32	62'7014686711	82	598'2665668491	32	68'6662452415	82	798'7402457462
33	66'2095274180	83	623'1972295231	33	72'7562262774	83	835'6835568048
34	69'8579085147	84	649'1251187040	34	77'0302564599	84	874'2893168610
35	73'6522248553	85	676'0901234521	35	81'4966180005	85	914'6323361199
36	77'5983138495	86	704'1337283902	36	86'1639658106	86	956'7907912453
37	81'7022464035	87	733'2990775258	37	91'0413442720	87	1000'8463768513
38	85'9703362596	88	763'6130406269	38	96'1382047643	88	1046'8844638096
39	90'4091497100	89	795'1762822519	39	101'4644239787	89	1094'9942646810
40	95'0255156984	90	827'9833335420	40	107'0303230577	90	1145'2690965917
41	99'8265363263	91	862'1026668837	41	112'8466875953	91	1197'8061118883
42	104'8195977794	92	897'5867735591	42	118'9247885371	92	1252'7073869233
43	110'0123816905	93	934'4902445014	43	125'2764040213	93	1310'0792193348
44	115'4128769582	94	972'88698542815	44	131'9138422022	94	1370'0327842049
45	121'0293920365	95	1012'7846484527	45	138'8499651013	95	1432'6842594941
46	126'8705677179	96	1054'2960343908	46	146'0982135309	96	1498'1550511713
47	132'9453904267	97	1097'4678757665	47	153'6726331398	97	1566'5720284740
48	139'2632060437	98	1142'3665907971	48	161'5879016311	98	1638'0677697553
49	145'8337342855	99	1189'0612544290	49	169'8593572045	99	1712'7808193943
50	152'6670836569	100	1237'6237046062	50	178'5030282787	100	1790'8559562671

Amount of £1 per annum in *n* years at the following rates per cent.

Years	5 per cent.	Years	5 per cent.	Years	5½ per cent.	Years	5½ per cent.
1	1*	51	220·8153955009	1	1*	51	260·7594376502
2	2·05	52	232·8561652759	2	2·055	52	276·1012067210
3	3·1525	53	245·4989735397	3	3·168025	53	292·2867730906
4	4·310125	54	258·7739222167	4	4·342266375	54	309·3625456106
5	5·52563125	55	272·7126183276	5	5·5810910256	55	327·3774856192
6	6·8019128125	56	287·3482492439	6	6·8880510320	56	346·3832473282
7	8·1420084531	57	302·7156617061	7	8·2668938388	57	366·4343259313
8	9·5491088758	58	318·8514447914	8	9·7215729999	58	387·5882138575
9	11·0265643196	59	335·7940170310	9	11·2562595149	59	409·9055656197
10	12·5778925355	60	353·5837178826	10	12·8753537882	60	433·4503717288
11	14·2067871623	61	372·2629037767	11	14·5834982466	61	458·2901421738
12	15·9171265204	62	391·8760489655	12	16·3855906502	62	484·4960999934
13	17·7129828465	63	412·4698514138	13	18·2867981359	63	512·1333854930
14	19·5986319888	64	434·0933439845	14	20·2925720334	64	541·3112716952
15	21·5785635882	65	456·7980111837	15	22·4086634952	65	572·0833916384
16	23·6574917676	66	480·6379117429	16	24·6411399875	66	604·5479781785
17	25·8403663560	67	505·6698073301	17	26·9964026868	67	638·7981169783
18	28·1323846738	68	531·9532976966	18	29·4812048345	68	674·9320134121
19	30·5390039075	69	559·5509625814	19	32·1026711004	69	713·0532741498
20	33·0659541029	70	588·5285107105	20	34·8683180110	70	753·2712042280
21	35·7192518080	71	618·9549362460	21	37·7860755016	71	795·7011204606
22	38·5052143984	72	650·9026830583	22	40·8643096542	72	840·4646820859
23	41·4304751184	73	684·4478172112	23	44·1118466851	73	887·6902396006
24	44·5019988743	74	719·670280718	24	47·5379982528	74	937·5132027787
25	47·7270988180	75	756·6537184754	25	51·1525881567	75	990·0764289315
26	51·1134537589	76	795·4864043992	26	54·9659805053	76	1045·5306325227
27	54·6691264468	77	836·2607246191	27	58·9891094331	77	1104·0348173115
28	58·4025827692	78	879·0737608501	28	63·2335104519	78	1165·7567322636
29	62·3227119076	79	924·0274488926	29	67·7113535268	79	1230·8733525381
30	66·4388475030	80	971·2288213372	30	72·4354779708	80	1299·5713809277
31	70·7607898782	81	1020·7902624041	31	77·4194292592	81	1372·0478132087
32	75·2988293721	82	1072·8297755243	32	82·6774978684	82	1448·5104429352
33	80·0637708407	83	1127·4712643005	33	88·2247602512	83	1529·1785172966
34	85·0669593827	84	1184·8448275156	34	94·0771220650	84	1614·2833357480
35	90·3203073518	85	1245·0870688914	35	100·2513637786	85	1704·0689192141
36	95·8363227194	86	1308·3414223359	36	106·7651887864	86	1798·7927097709
37	101·6281388554	87	1374·7584934527	37	113·6372741696	87	1898·7263088083
38	107·7095457982	88	1444·4964181254	38	120·8873242490	88	2004·1562557927
39	114·0950230881	89	1517·7212390316	39	128·5361270827	89	2115·3848498613
40	120·7997742425	90	1594·6073009832	40	136·6056140722	90	2232·7310166037
41	127·8397629546	91	1675·3376660324	41	145·1189228462	91	2356·5312225169
42	135·2317511024	92	1760·1045493340	42	154·1004636027	92	2487·1404397553
43	142·9933386575	93	1849·1097768007	43	163·5759891009	93	2624·9331639419
44	151·1430055904	94	1942·5652656408	44	173·5726685014	94	2770·3044879587
45	159·7001558699	95	2040·6935289228	45	184·1191652690	95	2923·6712347964
46	168·6851636634	96	2143·7282053689	46	195·2457193588	96	3085·4731527102
47	178·1194218465	97	2251·9146156374	47	206·9842339235	97	3256·1741761092
48	188·0253929389	98	2365·5103464193	48	219·3683667893	98	3436·2637557952
49	198·4266625858	99	2484·7858637402	49	232·4336269627	99	3626·2582623640
50	209·3479957151	100	2610·0251569272	50	246·2174764457	100	3826·7024667940

TABLE III.

Amount of £1 per annum in n years at the following rates per cent.

Years	6 per cent.	Years	6 per cent.	Years	7 per cent.	Years	7 per cent.
1	1'	51	308·7560588582	1	1'	51	435·9859545351
2	2'06	52	328·2814223897	2	2'07	52	467·5049713526
3	3'1836	53	348·9783077331	3	3'2149	53	501·2303193473
4	4'374616	54	370·9170061970	4	4'439943	54	537·3164417016
5	5'63709296	55	394·1720265689	5	5'75073901	55	575·9285926207
6	6'9753185376	56	418·8223481630	6	7'1532907407	56	617·2435941042
7	8'3938376499	57	444·9516890528	7	8'6540210925	57	661·4506456914
8	9'8974679088	58	472·6487903960	8	10'2598025690	58	708·7521908808
9	11'4913159834	59	502·0077178197	9	11'9779887489	59	759·3648442521
10	13'1807949424	60	533·1281808889	10	13'8164479613	60	813·5203833498
11	14'9716426389	61	566·1158717422	11	15'7835993186	61	871·4668101843
12	16'8699411973	62	601·0828240468	12	17'8884512709	62	933·4694868972
13	18'8821376691	63	638·1477934896	13	20'1406428598	63	999·8123509800
14	21'0150659292	64	677·4366610990	14	22'5504878600	64	1070·7992155486
15	23'2759698850	65	719·0828607649	15	25'1290220102	65	1146·7551606370
16	25'6725280781	66	763·2278324108	16	27'8880535509	66	1228·0280218815
17	28'2128797628	67	810·0215023555	17	30'8402172995	67	1314·9899834132
18	30'9056525485	68	859·6227924968	18	33'9990325104	68	1408·0392822522
19	33'7599917014	69	912·2001600466	19	37'3789647862	69	1507·6020320098
20	36'7855912035	70	967·9321696494	20	40'9954923212	70	1614·1341742505
21	39'9927266757	71	1027·0080998284	21	44'8651767837	71	1728·1235664480
22	43'3922902763	72	1089·6285858181	22	49'0057391585	72	1850·0922160994
23	46'9958276929	73	1156·0063009672	23	53'4361408996	73	1980·5986712264
24	50'8155773544	74	1226·3666790252	24	58'1766707626	74	2120·2405782122
25	54'8645119957	75	1300·9486797667	25	63'2490377160	75	2269·6574186871
26	59'1563827154	76	1380·0056005527	26	68'6764703561	76	2429·5334379952
27	63'7057656784	77	1463·8059365859	27	74'4832832810	77	2600·6007786548
28	68'5281116191	78	1552·6342927810	28	80'6976909107	78	2783·6428331606
29	73'6799831627	79	1646·7923503479	29	87'3495292745	79	2979·4978134819
30	79'0581862152	80	1746·5998913688	30	94'4607863237	80	3189·0626796856
31	84'8016773881	81	1852·3958848509	31	102'0730413663	81	3413·2970672636
32	90'8897780314	82	1964·5396379420	32	110'2181542620	82	3653·2278619721
33	97'3431647133	83	2083·4120162185	33	118'9334250603	83	3909·9538123101
34	104'1837545961	84	2209·4167371916	34	128'2587648145	84	4184·6505791718
35	111'4347798719	85	2342·9817414231	35	138'2368783515	85	4478·5761197139
36	119'1208666642	86	2484·5606459085	36	148'9134598361	86	4793·0764480938
37	127'2681186640	87	2634·6342846630	37	160'3374202027	87	5129·5917994604
38	135'9042057839	88	2793·7123417428	38	172'5610201664	88	5489·6632254226
39	145'0584581309	89	2962·3350822473	39	185'6402915780	89	5874·9396512022
40	154'7619656188	90	3141·0751871822	40	199'6351119885	90	6287·1854267864
41	165'0476835559	91	3330·5396984131	41	214'6095698277	91	6728·2884066614
42	175'9505445692	92	3531·3720803179	42	230'6322397156	92	7200·2685951277
43	187'5075772434	93	3744·2544051369	43	247'7764964957	93	7705·2873967866
44	199'7580318780	94	3969·9096694452	44	266'1208512504	94	8245·6575145617
45	212'7435137907	95	4209·1042496119	45	285'7493108380	95	8823·8535405810
46	226'5081246181	96	4462·6505045886	46	306'7517625966	96	9442·5232884217
47	241'0086120952	97	4731·4095348639	47	329'2243859784	97	10104·4999186112
48	256'5645288209	98	5016·2941069558	48	353'2700929969	98	10812·8149129140
49	272'9584005502	99	5318·2717533731	49	378'9989995066	99	11570·7119568180
50	290'3359045832	100	5638·3680585755	50	406'5289294721	100	12381·6617937952



Amount of £1 per annum in n years at the following rates per cent.

Years	8 per cent.	Years	8 per cent.	Years	9 per cent.	Years	9 per cent.
1	1'	51	620'671769	1	1'	51	889'441076
2	2'08	52	671'325510	2	2'09	52	970'490773
3	3'2464	53	726'031551	3	3'2781	53	1058'834943
4	4'506112	54	785'114075	4	4'573129	54	1155'130088
5	5'866601	55	848'923201	5	5'984711	55	1260'091796
6	7'335929	56	917'837058	6	7'523335	56	1374'500057
7	8'922803	57	992'264022	7	9'200435	57	1499'205063
8	10'636628	58	1072'645144	8	11'028474	58	1635'133518
9	12'487558	59	1159'456755	9	13'021036	59	1783'295535
10	14'486562	60	1253'213296	10	15'192930	60	1944'792133
11	16'645487	61	1354'470360	11	17'560293	61	2120'823425
12	18'977126	62	1463'827988	12	20'140720	62	2312'697533
13	21'495297	63	1581'934227	13	22'953385	63	2521'840331
14	24'214920	64	1709'488966	14	26'019189	64	2749'805939
15	27'152114	65	1847'248083	15	29'360916	65	2998'288474
16	30'324283	66	1996'027929	16	33'003399	66	3269'134436
17	33'750226	67	2156'710164	17	36'973705	67	3564'356535
18	37'450244	68	2330'246977	18	41'301338	68	3886'148624
19	41'446263	69	2517'666735	19	46'018458	69	4236'902000
20	45'761964	70	2720'080074	20	51'160120	70	4619'223180
21	50'422921	71	2938'686480	21	56'764530	71	5035'953266
22	55'456755	72	3174'781398	22	62'873338	72	5490'189060
23	60'893296	73	3429'763910	23	69'531939	73	5985'306075
24	66'764759	74	3705'145023	24	76'789813	74	6524'983622
25	73'105940	75	4002'556624	25	84'700896	75	7113'232148
26	79'954415	76	4323'761154	26	93'323977	76	7754'423041
27	87'350768	77	4670'662047	27	102'723135	77	8453'321115
28	95'338830	78	5045'315011	28	112'968217	78	9215'120015
29	103'965936	79	5449'940211	29	124'135356	79	10045'480817
30	113'283211	80	5886'935428	30	136'307539	80	10950'574090
31	123'345868	81	6358'890263	31	149'575217	81	11937'125758
32	134'213537	82	6868'601484	32	164'036987	82	13012'467077
33	145'950620	83	7419'089602	33	179'800315	83	14184'589114
34	158'626670	84	8013'616770	34	196'982344	84	15462'202134
35	172'316804	85	8655'706112	35	215'710755	85	16854'800326
36	187'102128	86	9349'162601	36	236'124723	86	18372'732355
37	203'070320	87	10098'095609	37	258'375948	87	20027'278267
38	220'315945	88	10906'943258	38	282'629783	88	21830'733311
39	238'941221	89	11780'498719	39	309'066463	89	23796'499309
40	259'056519	90	12723'938616	40	337'882445	90	25939'184247
41	280'781040	91	13742'853705	41	369'291865	91	28274'710829
42	304'243523	92	14843'282002	42	403'528133	92	30820'434804
43	329'583005	93	16031'744562	43	440'845665	93	33595'273936
44	356'949646	94	17315'284127	44	481'521775	94	36619'848591
45	386'505617	95	18701'506857	45	525'858734	95	39916'634964
46	418'426067	96	20198'627405	46	574'186021	96	43510'132110
47	452'900152	97	21815'517598	47	626'862762	97	47427'044000
48	490'132164	98	23561'759006	48	684'280411	98	51696'477960
49	530'342737	99	25447'699726	49	746'865648	99	56350'160977
50	573'770156	100	27484'515704	50	815'083556	100	61422'675465

TABLE III.

Amount of £1 per annum in n years at the following rates per cent.

Years	10 per cent.	Years	10 per cent.	Years	10 per cent.	Years	10 per cent.
1	1'	26	109'181765	51	1281'299382	76	13980'849085
2	2'10	27	121'099942	52	1410'429320	77	15379'933994
3	3'31	28	134'209936	53	1552'472252	78	16918'927393
4	4'64	29	148'630930	54	1708'719477	79	18611'820133
5	6'1051	30	164'494023	55	1880'591425	80	20474'002146
6	7'71561			56	2069'650567		
7	9'487171	31	181'943425	57	2277'615624	81	22522'402360
8	11'435888	32	201'137767	58	2506'377186	82	24775'642596
9	13'579477	33	222'251544	59	2758'014905	83	27254'206856
10	15'937425	34	245'476699	60	3034'816395	84	29980'627542
		35	271'024368			85	32979'690296
11	18'531167	36	299'126805	61	3339'298035	86	36278'659326
12	21'384284	37	330'039486	62	3674'227838	87	39907'525258
13	24'522712	38	364'043434	63	4042'650622	88	43899'277784
14	27'974983	39	401'447778	64	4447'915685	89	48290'205562
15	31'772482	40	442'592556	65	4893'707253	90	53120'226118
16	35'949730			66	5384'077978		
17	40'544703	41	487'851811	67	5923'485776	91	58433'248730
18	45'599173	42	537'636992	68	6516'834354	92	64277'573603
19	51'159090	43	592'400692	69	7169'517789	93	70706'330964
20	57'274999	44	652'640761	70	7887'469568	94	77777'964060
		45	718'904837			95	85556'760466
21	64'002499	46	791'795321	71	8677'216525	96	94113'436513
22	71'402749	47	871'974853	72	9545'938177	97	103525'780164
23	79'543024	48	960'172338	73	10501'531995	98	113879'358180
24	88'497327	49	1057'189572	74	11552'685195	99	125268'293998
25	98'347059	50	1163'908529	75	12708'953714	100	137796'123398



## TABLE IV.



TABLE IV.

Present value of £1 due n years hence at the following rates per cent.

Years	3 per cent.	Years	3 per cent.	Years	3½ per cent.	Years	3½ per cent.
1	·97087379	51	·22146318	1	·96618357	51	·17299843
2	·94259591	52	·21501280	2	·93351070	52	·16714824
3	·91514166	53	·20875029	3	·90194270	53	·16149589
4	·88848705	54	·20267019	4	·87144223	54	·15603467
5	·86260878	55	·19676717	5	·84197317	55	·15075814
6	·83748426	56	·19103609	6	·81350064	56	·14566004
7	·81309151	57	·18547193	7	·78599096	57	·14073433
8	·78940923	58	·18006984	8	·75941156	58	·13597520
9	·76641673	59	·17482508	9	·73373097	59	·13137701
10	·74409391	60	·16973309	10	·70891881	60	·12693431
11	·72242126	61	·16478941	11	·68494571	61	·12264184
12	·70137988	62	·15998972	12	·66178330	62	·11849453
13	·68095134	63	·15532982	13	·63940415	63	·11448747
14	·66111781	64	·15080565	14	·61778179	64	·11061591
15	·64186195	65	·14641325	15	·59689062	65	·10687528
16	·62316694	66	·14214879	16	·57670591	66	·10326114
17	·60501645	67	·13800853	17	·55720378	67	·09976922
18	·58739461	68	·13398887	18	·53836114	68	·09639538
19	·57028603	69	·13008628	19	·52015569	69	·09313563
20	·55367575	70	·12629736	20	·50256588	70	·08998612
21	·53754928	71	·12261880	21	·48557090	71	·08694311
22	·52189250	72	·11904737	22	·46915063	72	·08400300
23	·50669175	73	·11557998	23	·45328563	73	·08116232
24	·49193374	74	·11221357	24	·43795713	74	·07841770
25	·47760556	75	·10894521	25	·42314699	75	·07576590
26	·46369473	76	·10577205	26	·40883767	76	·07320376
27	·45018906	77	·10269131	27	·39501224	77	·07072827
28	·43707675	78	·09970030	28	·38165434	78	·06833650
29	·42434636	79	·09679641	29	·36874815	79	·06602560
30	·41198676	80	·09397710	30	·35627841	80	·06379285
31	·39998714	81	·09123990	31	·34423035	81	·06163561
32	·38833703	82	·08858243	32	·33258971	82	·05955131
33	·37702625	83	·08600236	33	·32134271	83	·05753750
34	·36604490	84	·08349743	34	·31047605	84	·05559178
35	·35538340	85	·08106547	35	·29997686	85	·05371187
36	·34503243	86	·07870434	36	·28983272	86	·05189553
37	·33498294	87	·07641198	37	·28003161	87	·05014060
38	·32522615	88	·07418639	38	·27056194	88	·04844503
39	·31575355	89	·07202562	39	·26141250	89	·04680679
40	·30655684	90	·06992779	40	·25257247	90	·04522395
41	·29762800	91	·06789105	41	·24403137	91	·04369464
42	·28895922	92	·06591364	42	·23577910	92	·04221704
43	·28054294	93	·06399383	43	·22780590	93	·04078941
44	·27237178	94	·06212993	44	·22010231	94	·03941006
45	·26443862	95	·06032032	45	·21265924	95	·03807735
46	·25673652	96	·05856342	46	·20546787	96	·03678971
47	·24925877	97	·05685769	47	·19851968	97	·03554562
48	·24199880	98	·05520164	48	·19180645	98	·03434358
49	·23495029	99	·05359383	49	·18532024	99	·03318221
50	·22810708	100	·05203284	50	·17905337	100	·03206011

Present value of £1 due n years hence at the following rates per cent.

Years	4 per cent.	Years	4 per cent.	Years	4½ per cent.	Years	4½ per cent.
1	·96153846	51	·13530059	1	·95693780	51	·10594225
2	·92445621	52	·13009672	2	·91572995	52	·10138014
3	·88899636	53	·12509300	3	·87629660	53	·99701449
4	·85480419	54	·12028173	4	·83856134	54	·99283683
5	·82192711	55	·11565551	5	·80245105	55	·98883907
6	·79031453	56	·11120722	6	·76789574	56	·98501347
7	·75991781	57	·10693002	7	·73482846	57	·98135260
8	·73069020	58	·10281733	8	·70318513	58	·97784938
9	·70258674	59	·99886282	9	·67290443	59	·97449701
10	·67556417	60	·99506040	10	·64392768	60	·97128901
11	·64958093	61	·99140423	11	·61619874	61	·96821915
12	·62459705	62	·98788868	12	·58966386	62	·96528148
13	·60057409	63	·98450835	13	·56427164	63	·96247032
14	·57747508	64	·98125803	14	·53997286	64	·95978021
15	·55526450	65	·97813272	15	·51672044	65	·95720594
16	·53390818	66	·97512760	16	·49446932	66	·95474253
17	·51337325	67	·97223809	17	·47317639	67	·95238519
18	·49362812	68	·96945970	18	·45280037	68	·95012937
19	·47464242	69	·96678818	19	·43330179	69	·94797069
20	·45638695	70	·96421940	20	·41464286	70	·94590497
21	·43883360	71	·96174942	21	·39678743	71	·94392820
22	·42195539	72	·95937445	22	·37970089	72	·94203655
23	·40572633	73	·95709081	23	·36335013	73	·94022637
24	·39012147	74	·95489501	24	·34770347	74	·93849413
25	·37511680	75	·95278367	25	·33273060	75	·93683649
26	·36068923	76	·95075353	26	·31840248	76	·93525023
27	·34681657	77	·94880147	27	·30469137	77	·93373228
28	·33347747	78	·94692449	28	·29157069	78	·93227969
29	·32065141	79	·94511970	29	·27901502	79	·93088966
30	·30831867	80	·94338433	30	·26700001	80	·92955947
31	·29646026	81	·94171570	31	·25550241	81	·92828658
32	·28505794	82	·94011125	32	·24449991	82	·92706850
33	·27409417	83	·93856851	33	·23397121	83	·92590287
34	·26355209	84	·93708510	34	·22389589	84	·92478744
35	·25341547	85	·93565875	35	·21425444	85	·92372003
36	·24366872	86	·93428726	36	·20502817	86	·92269860
37	·23429685	87	·93296852	37	·19619921	87	·92172115
38	·22528543	88	·93170050	38	·18775044	88	·92078579
39	·21662061	89	·93048125	39	·17966549	89	·91989070
40	·20828904	90	·92930890	40	·17192870	90	·91903417
41	·20027792	91	·92818163	41	·16452507	91	·91821451
42	·19257493	92	·92709772	42	·15744026	92	·91743016
43	·18516820	93	·92605550	43	·15066054	93	·91667958
44	·17804635	94	·92505337	44	·14417276	94	·91596132
45	·17110841	95	·92408978	45	·13796437	95	·91527399
46	·16461386	96	·92316325	46	·13202332	96	·91461626
47	·15828256	97	·92227235	47	·12633810	97	·91398685
48	·15219476	98	·92141572	48	·12089771	98	·91338454
49	·14634112	99	·92059204	49	·11569158	99	·91280817
50	·14071262	100	·91980004	50	·11070965	100	·91225663

TABLE IV.

78

Present value of £1 due n years hence at the following rates per cent.

Years	5 per cent.	Years	5 per cent.	Years	6 per cent.	Years	6 per cent.
1	·95238095	51	·08305117	1	·94339623	51	·05121544
2	·90702948	52	·07909635	2	·88999644	52	·04831645
3	·86383760	53	·07532986	3	·83961928	53	·04558156
4	·82270247	54	·07174272	4	·79209466	54	·04300147
5	·78352616	55	·06832640	5	·74725817	55	·04056742
6	·74621546	56	·06507276	6	·70496054	56	·03827115
7	·71068133	57	·06197406	7	·66505711	57	·03610486
8	·67683936	58	·05902291	8	·62741237	58	·03406119
9	·64460892	59	·05621230	9	·59189846	59	·03213320
10	·61391325	60	·05353552	10	·55839478	60	·03031434
11	·58467929	61	·05098621	11	·52678753	61	·02859843
12	·55683742	62	·04855830	12	·49696936	62	·02697965
13	·53032135	63	·04624600	13	·46883902	63	·02545250
14	·50506795	64	·04404381	14	·44230096	64	·02401179
15	·48101710	65	·04194648	15	·41726506	65	·02265264
16	·45811152	66	·03994903	16	·39364628	66	·02137041
17	·43629669	67	·03804670	17	·37136442	67	·02016077
18	·41552065	68	·03623495	18	·35034379	68	·01901959
19	·39573396	69	·03450948	19	·33051301	69	·01794301
20	·37688948	70	·03286617	20	·31180473	70	·01692737
21	·35894236	71	·03130111	21	·29415540	71	·01596921
22	·34184987	72	·02981058	22	·27750510	72	·01506530
23	·32557131	73	·02839103	23	·26179726	73	·01421254
24	·31006791	74	·02703908	24	·24697855	74	·01340806
25	·29530277	75	·02575150	25	·23299863	75	·01264911
26	·28124073	76	·02452524	26	·21981003	76	·01193313
27	·26784832	77	·02337377	27	·20736795	77	·01125767
28	·25509364	78	·02224512	28	·19563014	78	·01062044
29	·24294632	79	·02118582	29	·18455674	79	·01001928
30	·23137745	80	·02017698	30	·17411013	80	·00945215
31	·22035947	81	·01921617	31	·16425484	81	·00891713
32	·20986617	82	·01830111	32	·15495740	82	·00841238
33	·19987254	83	·01742963	33	·14618622	83	·00793621
34	·19035480	84	·01659965	34	·13791153	84	·00748699
35	·18129029	85	·01580919	35	·13010522	85	·00706320
36	·17265741	86	·01505637	36	·12274077	86	·00666340
37	·16443563	87	·01433940	37	·11579318	87	·00628622
38	·15660536	88	·01365657	38	·10923885	88	·00593040
39	·14914797	89	·01300626	39	·10305552	89	·00559472
40	·14204568	90	·01238691	40	·09722219	90	·00527803
41	·13528160	91	·01179706	41	·09171905	91	·00497928
42	·12883962	92	·01123530	42	·08652740	92	·00469743
43	·12270440	93	·01070028	43	·08162962	93	·00443154
44	·11686133	94	·01019074	44	·07700908	94	·00418070
45	·11129651	95	·00970547	45	·07265007	95	·00394405
46	·10599668	96	·00924331	46	·06853781	96	·00372081
47	·10094921	97	·00880315	47	·06465831	97	·00351019
48	·09614211	98	·00838395	48	·06099840	98	·00331150
49	·09156391	99	·00798471	49	·05754566	99	·00312406
50	·08720373	100	·00760449	50	·05428836	100	·00294723



Present value of £1 due  $n$  years hence at the following rates per cent.

Years	7 per cent.	Years	7 per cent.	Years	8 per cent.	Years	8 per cent.
1	·93457944	51	·03172688	1	·92592593	51	·01974188
2	·87343873	52	·02965129	2	·85733882	52	·01827952
3	·81629788	53	·02771148	3	·79383224	53	·01692548
4	·76289521	54	·02589858	4	·73502985	54	·01567174
5	·71298618	55	·02420428	5	·68058320	55	·01451087
6	·66634222	56	·02262083	6	·63016963	56	·01343599
7	·62274974	57	·02114096	7	·58349040	57	·01244073
8	·58200910	58	·01975791	8	·54026888	58	·01151920
9	·54393374	59	·01846533	9	·50024897	59	·01066592
10	·50834929	60	·01725732	10	·46319349	60	·00987585
11	·47509280	61	·01612834	11	·42888286	61	·00914431
12	·44401196	62	·01507321	12	·39711376	62	·00846696
13	·41496445	63	·01408711	13	·36769792	63	·00783977
14	·38781724	64	·01316553	14	·34046104	64	·00725995
15	·36244602	65	·01230423	15	·31524171	65	·00672134
16	·33873460	66	·01149928	16	·29189047	66	·00622346
17	·31657439	67	·01074699	17	·27026895	67	·00576247
18	·29586392	68	·01004392	18	·25024903	68	·00533562
19	·27650833	69	·00938684	19	·23171206	69	·00494039
20	·25841900	70	·00877275	20	·21454821	70	·00457443
21	·24151309	71	·00819883	21	·19865575	71	·00423558
22	·22571317	72	·00766246	22	·18394051	72	·00392184
23	·21034688	73	·00716117	23	·17031528	73	·00363133
24	·19714652	74	·00669269	24	·15769934	74	·00336234
25	·18424918	75	·00625485	25	·14601790	75	·00311328
26	·17219549	76	·00584565	26	·13520176	76	·00288267
27	·16093037	77	·00546323	27	·12518682	77	·00266914
28	·15040221	78	·00510582	28	·11591372	78	·00247142
29	·14056282	79	·00477179	29	·10732752	79	·00228835
30	·13136712	80	·00445962	30	·09937733	80	·00211885
31	·12277301	81	·00416787	31	·09201605	81	·00196190
32	·11474113	82	·00389520	32	·08520005	82	·00181657
33	·10723470	83	·00364038	33	·07888893	83	·00168201
34	·10021934	84	·00340222	34	·07304531	84	·00155742
35	·09366294	85	·00317965	35	·06763454	85	·00144205
36	·08753546	86	·00297163	36	·06262458	86	·00133523
37	·08180884	87	·00277723	37	·05799572	87	·00123633
38	·07645686	88	·00259554	38	·05369048	88	·00114475
39	·07145501	89	·00242574	39	·04971341	89	·00105995
40	·06678038	90	·00226704	40	·04603093	90	·00098144
41	·06241157	91	·00211873	41	·04262123	91	·00090874
42	·05832857	92	·00198012	42	·03946411	92	·00084142
43	·05451268	93	·00185058	43	·03654084	93	·00077910
44	·05094643	94	·00172952	44	·03383411	94	·00072138
45	·04761349	95	·00161637	45	·03132788	95	·00066795
46	·04449859	96	·00151063	46	·02900730	96	·00061847
47	·04158747	97	·00141180	47	·02685861	97	·00057265
48	·03886679	98	·00131944	48	·02486908	98	·00053024
49	·03632410	99	·00123312	49	·02302693	99	·00049096
50	·03394776	100	·00115245	50	·02132123	100	·00045459

TABLE IV.

Present value of £1 due n years hence at the following rates per cent.

Years	9 per cent.	Years	9 per cent.	Years	10 per cent.	Years	10 per cent.
1	·91743119	51	·01233811	1	·90909091	51	·00774414
2	·84167999	52	·01131937	2	·82644628	52	·00704013
3	·77218348	53	·01038474	3	·75131480	53	·00640011
4	·70842521	54	·00952728	4	·68301346	54	·00581829
5	·64993139	55	·00874063	5	·62092132	55	·00528935
6	·59626733	56	·00801892	6	·56447393	56	·00480850
7	·54703424	57	·00735681	7	·51315812	57	·00437136
8	·50186628	58	·00674937	8	·46650738	58	·00397397
9	·46042778	59	·00619208	9	·42409762	59	·00361270
10	·42241081	60	·00568081	10	·38554329	60	·00328427
11	·38753285	61	·00521175	11	·35049390	61	·00298570
12	·35553473	62	·00478142	12	·31863082	62	·00271427
13	·32617865	63	·00438663	13	·28966438	63	·00246752
14	·29924647	64	·00402443	14	·26333125	64	·00224320
15	·27453804	65	·00369214	15	·23939205	65	·00203927
16	·25186976	66	·00338728	16	·21762914	66	·00185388
17	·23107318	67	·00310760	17	·19784467	67	·00168535
18	·21199374	68	·00285101	18	·17985879	68	·00153214
19	·19448967	69	·00261560	19	·16350799	69	·00139285
20	·17843089	70	·00239963	20	·14864363	70	·00126623
21	·16369806	71	·00220150	21	·13513057	71	·00115112
22	·15018171	72	·00201972	22	·12284597	72	·00104647
23	·13778139	73	·00185296	23	·11167816	73	·00095134
24	·12640494	74	·00169996	24	·10152560	74	·00086485
25	·11596784	75	·00155960	25	·99229600	75	·00078623
26	·10639251	76	·00143082	26	·88390545	76	·00071475
27	·09760781	77	·00131268	27	·77627768	77	·00064978
28	·08954845	78	·00120430	28	·66934335	78	·00059070
29	·08215454	79	·00110486	29	·56303941	79	·00053700
30	·07537114	80	·00101363	30	·45730855	80	·00048819
31	·06914783	81	·00092994	31	·35209868	81	·00044381
32	·06343838	82	·00085315	32	·24736244	82	·00040346
33	·05820035	83	·00078271	33	·14305676	83	·00036678
34	·05339481	84	·00071808	34	·03914251	84	·00033344
35	·04898607	85	·00065879	35	·03558410	85	·00030313
36	·04494135	86	·00060440	36	·03236418	86	·00027557
37	·04123059	87	·00055449	37	·02940835	87	·00025052
38	·03782623	88	·00050871	38	·02673486	88	·00022774
39	·03470296	89	·00046670	39	·02430442	89	·00020704
40	·03183758	90	·00042817	40	·02209493	90	·00018822
41	·02920879	91	·00039282	41	·02008630	91	·00017111
42	·02679706	92	·00036038	42	·01826027	92	·00015555
43	·02458446	93	·00033063	43	·01660025	93	·00014141
44	·02255455	94	·00030333	44	·01509113	94	·00012855
45	·02069224	95	·00027828	45	·01371921	95	·00011687
46	·01898371	96	·00025530	46	·01247201	96	·00010624
47	·01741625	97	·00023422	47	·01133819	97	·00009658
48	·01597821	98	·00021488	48	·01030745	98	·00008780
49	·01465891	99	·00019714	49	·00937041	99	·00007982
50	·01344854	100	·00018086	50	·00851855	100	·00007257

Present value of £1 due n years hence at the following rates per cent.

Years	11 per cent.	12 per cent.	13 per cent.	14 per cent.	15 per cent.	Years
1	·90090090	·89285714	·88495575	·87719211	·86956530	1
2	·81162243	·79719388	·78314668	·76946753	·75614367	2,
3	·73119138	·71178025	·69305016	·67497152	·65751623	3
4	·65873097	·63551808	·61331873	·59208028	·57175325	4
5	·59345133	·56742686	·54275994	·51936866	·49717674	5
6	·53464084	·50663112	·48031853	·45558655	·43232760	6
7	·48165841	·45234922	·42506064	·39963732	·37593704	7
8	·43392650	·40388323	·37615986	·35055905	·32690177	8
9	·39092477	·36061003	·33288483	·30750794	·28426241	9
10	·35218448	·32197324	·29458835	·26974381	·24718571	10
11	·31728331	·28747610	·26069765	·23661738	·21494322	11
12	·28584082	·25667509	·23070589	·20755910	·18690715	12
13	·25751426	·22917419	·20416450	·18206939	·16252796	13
14	·23199482	·20461981	·18067655	·15970999	·14132866	14
15	·20900435	·18269626	·15989075	·14000648	·12289449	15
16	·18829220	·16312166	·14149624	·12289165	·10686477	16
17	·16963262	·14564434	·12521791	·10779969	·9292589	17
18	·15282218	·13003959	·11081231	·99456113	·88080512	18
19	·13767764	·11610678	·99806399	·88294836	·77026532	19
20	·12403391	·10366677	·88678229	·77276172	·66110028	20
21	·11174226	·92555961	·7679849	·66382607	·55313068	21
22	·10066870	·8264251	·66796327	·55987778	·4620059	22
23	·90606252	·7378796	·6014448	·4911209	·4017443	23
24	·8170498	·6588210	·5322521	·4308078	·3493428	24
25	·7360809	·5882331	·4710195	·3779016	·3037764	25
26	·66631359	·5252081	·4168314	·3314926	·2641534	26
27	·5974197	·4689358	·3688774	·2907830	·2296986	27
28	·5382160	·4186927	·3264402	·2550728	·1997379	28
29	·4848793	·3738327	·2888851	·2237481	·1736851	29
30	·4368282	·3337792	·2556505	·1962702	·1510305	30
31	·3935389	·2980172	·2262394	·1721669	·1313309	31
32	·3545395	·2660868	·2002119	·1510236	·1142008	32
33	·3194050	·2375775	·1771786	·1324768	·9903344	33
34	·2877522	·2121227	·1567953	·1162077	·863522	34
35	·2592363	·1893953	·1387569	·1019366	·750889	35
36	·2335462	·1691029	·1227937	·894181	·652947	36
37	·2104020	·1509848	·1086670	·784369	·567798	37
38	·1895513	·1348078	·961655	·688043	·493722	38
39	·1707670	·1203641	·851023	·6063547	·429323	39
40	·1538441	·1074680	·753117	·529427	·373324	40
41	·1385983	·959536	·666475	·464410	·324630	41
42	·1248633	·856728	·589801	·407377	·282287	42
43	·1124895	·764936	·521948	·357348	·245467	43
44	·1013419	·682978	·461901	·313463	·213449	44
45	·9091299	·609802	·408762	·274968	·185608	45
46	·822513	·544466	·361736	·241200	·161398	46
47	·741003	·486131	·320120	·211579	·140346	47
48	·6667670	·434045	·283292	·185595	·122040	48
49	·60601415	·3887540	·250701	·162803	·106122	49
50	·5541815	·346018	·221859	·142810	·92280	50

TABLE IV.

Present value of £1 due  $n$  years hence at the following rates per cent.

Years	16 per cent.	17 per cent.	18 per cent.	19 per cent.	20 per cent.	Years
1	·86206897	·85470085	·84745763	·84033613	·83333333	1
2	·74316290	·73051355	·71818443	·70616482	·69444444	2
3	·64065767	·62437056	·60863087	·59341581	·57870370	3
4	·55229110	·53365005	·51578888	·49866875	·48225309	4
5	·47611302	·45611115	·43710922	·41904937	·40187757	5
6	·41044225	·38983859	·37043154	·35214233	·33489798	6
7	·35382952	·33319538	·31392503	·29591792	·27908165	7
8	·30502546	·28478237	·26603816	·24867052	·23256804	8
9	·26295298	·24340374	·22545607	·20866683	·19380670	9
10	·22668360	·20803738	·19106447	·17560238	·16150558	10
11	·19541690	·17780973	·16191904	·14756502	·13458799	11
12	·16846284	·15197413	·13721953	·12400422	·11215665	12
13	·14522659	·12989242	·11628773	·10420523	·9346388	13
14	·12519534	·11101916	·9854893	·8756742	·7788657	14
15	·10792701	·9488817	·8351604	·7358606	·6490547	15
16	·9304053	·8110100	·7077628	·6183703	·5408789	16
17	·8020735	·6931709	·5997992	·5196389	·4507324	17
18	·6914427	·5924538	·5083044	·4366713	·3756104	18
19	·5960713	·5063708	·4307664	·3669507	·3130086	19
20	·5138546	·4327955	·3650563	·3083619	·2608405	20
21	·4429781	·3699107	·3093698	·2591277	·2173671	21
22	·3818776	·3161630	·2621778	·2177544	·1811393	22
23	·3292049	·2702248	·2219846	·1829869	·1509494	23
24	·2837973	·2309614	·1882920	·1537705	·1257912	24
25	·2446528	·1974029	·1595695	·1292189	·1048260	25
26	·2109076	·1687204	·1352284	·1085873	·8873550	26
27	·1818169	·1442055	·1146003	·9912498	·7727958	27
28	·1567387	·1232525	·9971189	·866805	·666632	28
29	·1351196	·1053440	·8823042	·744374	·555526	29
30	·1164824	·900376	·7697493	·641491	·421272	30
31	·1004159	·769553	·6591096	·555034	·4351060	31
32	·865654	·6657737	·5500929	·4382382	·3292550	32
33	·746253	·562169	·4424516	·321329	·2243792	33
34	·643322	·480486	·359759	·270025	·203160	34
35	·554588	·410672	·304880	·226911	·169300	35
36	·478093	·351002	·258373	·190682	·141083	36
37	·412149	·300001	·218960	·160237	·117569	37
38	·355301	·256411	·185560	·134653	·997974	38
39	·306294	·2299155	·157254	·113154	·81645	39
40	·264047	·187312	·133266	·95087	·68038	40
41	·227626	·160096	·112937	·79905	·56698	41
42	·196230	·136834	·95710	·67147	·47248	42
43	·169163	·116952	·81110	·56426	·39374	43
44	·145831	·999959	·68737	·47417	·32811	44
45	·125716	·885435	·58252	·39846	·27343	45
46	·108376	·73021	·49366	·33484	·22786	46
47	·93427	·6062411	·43662	·28138	·18988	47
48	·8080541	·53343	·35454	·23645	·15823	48
49	·6969432	·45592	·30046	·19870	·13186	49
50	·595855	·38968	·25462	·16698	·10988	50

Present value of £1 due *n* years hence at the following rates per cent.

Years	21 per cent.	22 per cent.	23 per cent.	24 per cent.	25 per cent.	Years
1	·82644628	·81967213	·81300813	·80645161	·80000000	1
2	·68301346	·67186240	·66098222	·65036420	·64000000	2
3	·56447393	·55070689	·53738392	·52448726	·51199869	3
4	·46650738	·45139909	·43689749	·42297360	·40959937	4
5	·38554329	·36999925	·35520122	·34110774	·32768000	5
6	·31863082	·30327808	·28878148	·27508689	·26214400	6
7	·26333125	·24858859	·23478169	·22184426	·20971520	7
8	·21762914	·20376114	·19087942	·17890666	·16777216	8
9	·17985879	·16701733	·15518652	·14427957	·13421773	9
10	·14864363	·13689945	·12616790	·11635449	·10737418	10
11	·12284597	·11221266	·10257553	·9383427	·8589935	11
12	·10152560	·9197759	·8339474	·7567280	·6871948	12
13	·83990545	·7539147	·6780060	·6102645	·5497558	13
14	·6934335	·6179629	·5512244	·4921488	·4398047	14
15	·5730855	·5065269	·4481499	·3968942	·3518437	15
16	·4736244	·4151860	·3643495	·3200759	·2814750	16
17	·3914251	·3403164	·2962191	·2581258	·2251800	17
18	·3234918	·2789479	·2408286	·2081659	·1801440	18
19	·2673486	·2286458	·1957956	·1678758	·1441152	19
20	·2209493	·1874146	·1591834	·1353837	·1152922	20
21	·1826027	·1536185	·1294174	·1091804	·922337	21
22	·1509113	·1259168	·1052174	·880487	·737870	22
23	·1247201	·1032105	·855426	·710070	·590296	23
24	·1030745	·845988	·695468	·572637	·472237	24
25	·851855	·693433	·565421	·461804	·377789	25
26	·704013	·568387	·459692	·372423	·302231	26
27	·581829	·465891	·373733	·300341	·241785	27
28	·480850	·381878	·303848	·242210	·193428	28
29	·397397	·313015	·247031	·195331	·154743	29
30	·328427	·256570	·200838	·157525	·123794	30
31	·271427	·210303	·163283	·127036	·999035	31
32	·224260	·172379	·132751	·102449	·79228	32
33	·185388	·141295	·107927	·82620	·63383	33
34	·153214	·115815	·87746	·66629	·50706	34
35	·126228	·94931	·71338	·53733	·404565	35
36	·104647	·77812	·57998	·43333	·32452	36
37	·86485	·63780	·47153	·34946	·25961	37
38	·71475	·52279	·38336	·28182	·20769	38
39	·59070	·42852	·31167	·22728	·16615	39
40	·48819	·35124	·25339	·18329	·13292	40
41	·404346	·282793	·20601	·14781	·10634	41
42	·33344	·23599	·16749	·11920	·8507	42
43	·27557	·19345	·13617	·99613	·6806	43
44	·22774	·15855	·11071	·87753	·5445	44
45	·18822	·12960	·9001	·76252	·4356	45
46	·15555	·10652	·7318	·65042	·3484	46
47	·12855	·8731	·5949	·54066	·2788	47
48	·10624	·7157	·4837	·43279	·2230	48
49	·88780	·5866	·3932	·3644	·1784	49
50	·7257	·4808	·3197	·2133	·1427	50

**TABLE V.**  
**FOR THE**  
**REDEMPTION OF CAPITAL.**



TABLE V.

Redemption Fund necessary to produce £1 in  $n$  years at the following rates per cent.

Years	1½ per cent.	Years	1½ per cent.	Years	2 per cent.	Years	2 per cent.
1	1'0000000000	51	'0131946887	1	1'0000000000	51	'0114585615
2	'4962779156	52	'0128328700	2	'4950495049	52	'0111090856
3	'3283829602	53	'0124853664	3	'3267546725	53	'0107739189
4	'2444447860	54	'0121513812	4	'2426237526	54	'0104522618
5	'1940893230	55	'0118301756	5	'1921583941	55	'0101433732
6	'1605252147	56	'0115202954	6	'1585258123	56	'0098465645
7	'1365561645	57	'0112234068	7	'1345119561	57	'0095611957
8	'1185840245	58	'0109366116	8	'1165097991	58	'0092866706
9	'1046098234	59	'0106601241	9	'1025154374	59	'0090224335
10	'0934341779	60	'0103934274	10	'0913265279	60	'0087679658
11	'0842938442	61	'0101360387	11	'0821779422	61	'0081744379
12	'0766799929	62	'0098875059	12	'0745595966	62	'0082864306
13	'0702403574	63	'0096474061	13	'0681183527	63	'0080584849
14	'0647233186	64	'0094153423	14	'0626019702	64	'0078385471
15	'0599443556	65	'0091909423	15	'0578254723	65	'0076262436
16	'0557650778	66	'0089738563	16	'0536501259	66	'0074212231
17	'0520796569	67	'0087637552	17	'0499698408	67	'0072231553
18	'0488057818	68	'0085603297	18	'0467021021	68	'0070317294
19	'0458784701	69	'0083632878	19	'0437817663	69	'0068466526
20	'0432457359	70	'0081723548	20	'0411567181	70	'0066676485
21	'0408654950	71	'0079872709	21	'0387847689	71	'0064944567
22	'0387033152	72	'0078077911	22	'0366314005	72	'0063268307
23	'0367307520	73	'0076336836	23	'0346680976	73	'0061645379
24	'0349241020	74	'0074647293	24	'0328710973	74	'0060073582
25	'0332634539	75	'0073007206	25	'0312204384	75	'0058550830
26	'0317319599	76	'0071414609	26	'0296992308	76	'0057075147
27	'0303152680	77	'0069867637	27	'0282930862	77	'0055644661
28	'0290010765	78	'0068364523	28	'0269896716	78	'0054257595
29	'0277787802	79	'0066903586	29	'0257783552	79	'0052912260
30	'0266391883	80	'0065483231	30	'0246499223	80	'0051607055
31	'0255742954	81	'0064101941	31	'0235963472	81	'0050340453
32	'0245770970	82	'0062758275	32	'0226106073	82	'0049111006
33	'0236414375	83	'0061450857	33	'0216865311	83	'0047917333
34	'0227618855	84	'0060178380	34	'0208186728	84	'0046758118
35	'0219336303	85	'0058939597	35	'0200022092	85	'0045632109
36	'0211523955	86	'0057733319	36	'0192328526	86	'0044538110
37	'0204143673	87	'0056558413	37	'0185067789	87	'0043474981
38	'0197161329	88	'0055413794	38	'0178205663	88	'0042441633
39	'0190546298	89	'0054298429	39	'0171711439	89	'0041437027
40	'0184271017	90	'0053211330	40	'0165557478	90	'0040460169
41	'0178310610	91	'0052151552	41	'0159718836	91	'0039510108
42	'0172642571	92	'0051118190	42	'0154172945	92	'0038585936
43	'0167246488	93	'0050101379	43	'0148899334	93	'0037686782
44	'0162103801	94	'0049127291	44	'0143879391	94	'0036811814
45	'0157197604	95	'0048168132	45	'0139096161	95	'0035960233
46	'0152512458	96	'0047232141	46	'0134534159	96	'0035131275
47	'0148034238	97	'0046318590	47	'0130172220	97	'0034324205
48	'0143749906	98	'0045426778	48	'0126018355	98	'0033583321
49	'0139647841	99	'0044556033	49	'0122039639	99	'0032772947
50	'0135716832	100	'0043705712	50	'0118232097	100	'0032027435



Redemption Fund necessary to produce £1 in  $n$  years at the following rates per cent.

Years	2½ per cent.	Years	2½ per cent.	Years	3 per cent.	Years	3 per cent.
1	1'0000000000	51	'0099086955	1	1'0000000000	51	'0085338232
2	'4938271604	52	'0095744635	2	'4926108374	52	'0082171837
3	'3251371672	53	'0092544943	3	'3235303633	53	'0079147059
4	'2408178777	54	'0089479856	4	'2390270452	54	'0076255841
5	'1902468603	55	'0086541932	5	'1883545714	55	'0073490710
6	'1565499709	56	'0083724260	6	'1545975005	56	'0070844726
7	'1324954297	57	'0081020412	7	'1305063538	57	'0068311432
8	'1144673456	58	'0078424404	8	'1124563888	58	'0065884819
9	'1004568897	59	'0075930656	9	'0084338570	59	'0063559281
10	'0892587631	60	'0073533959	10	'0872305066	60	'0061329587
11	'0801059558	61	'0071229444	11	'0780774478	61	'0059190847
12	'0724871271	62	'0069012558	12	'0704620855	62	'0057138575
13	'0660482710	63	'0066879033	13	'0640295440	63	'0055168216
14	'0605305249	64	'0064824869	14	'0585263390	64	'0053276021
15	'0557664561	65	'0062846310	15	'0537665805	65	'0051458128
16	'0515989886	66	'0060939830	16	'0496108493	66	'0049710995
17	'0479277609	67	'0059102110	17	'0459525294	67	'0048031288
18	'0446700805	68	'0057330027	18	'0427086959	68	'0046415871
19	'0417606151	69	'0055620638	19	'0398138806	69	'0044861787
20	'0391471287	70	'0053971168	20	'0372157076	70	'0043366251
21	'0367873272	71	'0052378997	21	'0348717765	71	'0041926632
22	'0346466060	72	'0050841652	22	'0327473948	72	'0040540446
23	'0326063781	73	'0049356794	23	'0308139027	73	'0039205345
24	'0309128203	74	'0047922210	24	'0290474159	74	'0037919109
25	'0292759209	75	'0046535805	25	'0274278710	75	'0036679633
26	'0277687466	76	'0045195594	26	'0259382903	76	'0035484929
27	'0263768721	77	'0043899655	27	'0245642103	77	'0034333105
28	'0250879326	78	'0042646320	28	'0232932334	78	'0033222371
29	'0238912684	79	'0041433776	29	'0221156771	79	'00321151027
30	'0227776407	80	'0040260451	30	'0210192593	80	'0031117457
31	'0217390024	81	'0039124812	31	'0199989288	81	'0030120127
32	'0207683122	82	'0038025403	32	'0190466183	82	'0029157577
33	'0198593818	83	'0036960837	33	'0181561219	83	'0028228417
34	'0190067507	84	'0035929793	34	'0173219634	84	'0027331326
35	'0182055822	85	'0034931011	35	'0165392916	85	'0026465042
36	'0174515767	86	'0033963292	36	'0158037042	86	'0025628365
37	'0167408991	87	'0033025489	37	'0151116244	87	'0024820151
38	'0160701179	88	'0032116510	38	'0144593401	88	'0024039306
39	'0154361533	89	'0031235310	39	'0138438516	89	'0023284787
40	'0148362331	90	'0030380892	40	'0132623779	90	'0022555599
41	'0142678555	91	'0029552302	41	'0127124089	91	'0021850789
42	'0137287567	92	'0028748628	42	'0121916731	92	'0021169449
43	'0132168832	93	'0027968996	43	'0116981103	93	'0020510708
44	'0127303682	94	'0027212571	44	'0112298469	94	'0019873733
45	'0122675105	95	'0026478552	45	'0107851757	95	'0019257729
46	'0118267567	96	'0025766173	46	'0103625378	96	'0018661933
47	'0114066855	97	'0025074697	47	'0099605065	97	'0018085613
48	'0110059938	98	'0024403421	48	'0095777738	98	'0017528070
49	'0106234846	99	'0023751667	49	'0092131383	99	'0016988633
50	'0102580569	100	'0023118786	50	'0088654944	100	'0016466659

Redemption Fund necessary to produce £1 in *n* years at the following rates per cent.

Years	3½ per cent.	Years	3½ per cent.	Years	3½ per cent.	Years	3½ per cent.
1	1'0000000000	51	'0079081725	1	1'0000000000	51	'0073215641
2	'4920045476	52	'0076010287	2	'4914004914	52	'0070242854
3	'3227307792	53	'0073079716	3	'3219341806	53	'0067409979
4	'2381372828	54	'0070281934	4	'2372511395	54	'0064708979
5	'1874155909	55	'0067609454	5	'1864813732	55	'0062132297
6	'1536299447	56	'0065055321	6	'1526682087	56	'0059672981
7	'1295220120	57	'0062613065	7	'1285444938	57	'0057324549
8	'1114626472	58	'0060276663	8	'1104766465	58	'0055080966
9	'097435561	59	'0058040498	9	'0964460051	59	'0052936605
10	'0862310733	60	'0055899327	10	'0852413679	60	'0050886213
11	'0770793519	61	'0053848252	11	'0760919658	61	'0048924882
12	'0694671846	62	'0051882685	12	'0684839493	62	'0047048020
13	'0630392523	63	'0049998334	13	'0620615726	63	'0045251325
14	'0575417594	64	'0048191173	14	'0565707287	64	'0043530765
15	'0527885769	65	'0046457423	15	'0518250694	65	'0041882558
16	'0486401341	66	'0044793534	16	'0476848306	66	'0040303148
17	'0449896669	67	'0043196168	17	'0440431317	67	'0038789193
18	'0417541470	68	'0041662182	18	'0408168408	68	'0037337550
19	'0388680383	69	'0040188617	19	'0379403252	69	'0035945255
20	'0362788848	70	'0038772683	20	'0353610768	70	'0034609517
21	'0339442356	71	'0037411746	21	'0330365869	71	'0033327702
22	'0318293586	72	'0036103320	22	'0309320742	72	'0032097323
23	'0299055555	73	'0034845054	23	'0290188043	73	'0030916030
24	'0281489054	74	'0033634725	24	'0272728303	74	'0029781601
25	'0265393258	75	'0032470228	25	'0256740354	75	'0028691934
26	'0250598100	76	'0031349574	26	'0242053963	76	'0027645039
27	'0236958807	77	'0030270874	27	'02285524103	77	'0026639029
28	'0224351188	78	'0029232333	28	'0216026452	78	'0025672117
29	'0212668234	79	'0028232256	29	'0204453825	79	'0024832606
30	'0201817174	80	'0027269026	30	'0193713316	80	'0023848887
31	'0191717180	81	'0026341111	31	'0183723998	81	'0022989429
32	'0182297550	82	'0025447051	32	'0174415048	82	'0022162781
33	'0173496132	83	'0024585460	33	'0165724220	83	'0021367560
34	'0165258003	84	'0023755019	34	'0157596583	84	'0020602452
35	'0157534809	85	'0022954470	35	'0149983473	85	'0019866205
36	'0150283131	86	'0022182616	36	'0142841628	86	'0019157629
37	'0143404505	87	'0021438315	37	'0136132454	87	'0018475589
38	'0137044457	88	'0020720479	38	'0129821414	88	'0017819002
39	'0130992039	89	'0020028067	39	'0123877506	89	'0017186838
40	'0125279401	90	'0019360090	40	'0118272823	90	'0016578111
41	'0119881387	91	'0018715599	41	'0112982174	91	'0015991884
42	'0114775251	92	'0018093692	42	'0107982765	92	'0015427259
43	'0109940346	93	'0017493500	43	'0103253914	93	'0014883379
44	'0105357906	94	'0016914200	44	'0098776816	94	'0014359428
45	'0101010826	95	'0016354999	45	'0094534334	95	'0013854621
46	'0096883484	96	'0015815142	46	'0090510817	96	'0013368213
47	'0092961589	97	'0015293902	47	'0086691944	97	'0012899487
48	'0089232032	98	'0014790587	48	'0083064580	98	'0012447758
49	'0085682777	99	'0014304533	49	'0079616665	99	'0012012372
50	'0082302744	100	'0013835101	50	'0076337096	100	'0011592702

Redemption Fund necessary to produce £1 in *n* years at the following rates per cent.

Years	4 per cent.	Years	4 per cent.	Years	4½ per cent.	Years	4½ per cent.
1	1'0000000000	51	'0062588497	1	1'0000000000	51	'0057793980
2	'4901960784	52	'0059821236	2	'4895858012	52	'0055132157
3	'3203485392	53	'0057191451	3	'3195596844	53	'0052606425
4	'2354900454	54	'0054691025	4	'2346150491	54	'0050208438
5	'1846271135	55	'0052312426	5	'1837070439	55	'0047930729
6	'1507619025	56	'0050048662	6	'1498173286	56	'0045766300
7	'1266006121	57	'0047893234	7	'1256522089	57	'0043708645
8	'1085278320	58	'0045840087	8	'1075649275	58	'0041751705
9	'0944929927	59	'0043883581	9	'0935294356	59	'0039889840
10	'0832909443	60	'0042018451	10	'0823301166	60	'0038117785
11	'0741490393	61	'0040239779	11	'0731933807	61	'0036430616
12	'0665521727	62	'0038542964	12	'0656034888	62	'0034823743
13	'0601437278	63	'0036923701	13	'0592033981	63	'0033292857
14	'0546689731	64	'0035377955	14	'0537380572	64	'0031833933
15	'0499411004	65	'0033901939	15	'0490204277	65	'0030443184
16	'0458109992	66	'0032492100	16	'0449102239	66	'0029117068
17	'0421985221	67	'0031145099	17	'0413001642	67	'0027852249
18	'0389933282	68	'0029857795	18	'0379785883	68	'0026645598
19	'0361386184	69	'0028527231	19	'0352642692	69	'0025494164
20	'0335817503	70	'0027450623	20	'0327198351	70	'0024395176
21	'0312801054	71	'0026325344	21	'0304308333	71	'0023346017
22	'0291988111	72	'0025248919	22	'0283623442	72	'0022344222
23	'0273090568	73	'0024219008	23	'0264855182	73	'0021387467
24	'0255868313	74	'0023233403	24	'0247763107	74	'0020473553
25	'0240119628	75	'0022290015	25	'0232145232	75	'0019600406
26	'0225673805	76	'0021386869	26	'0217830598	76	'0018766066
27	'0212385106	77	'0020522095	27	'0204673559	77	'0017968678
28	'0200129752	78	'0019693922	28	'0192549241	78	'0017206554
29	'0188799342	79	'0018900672	29	'0181349985	79	'0016477824
30	'0178300991	80	'0018140755	30	'0170983084	80	'0015781123
31	'0168553524	81	'0017412661	31	'0161365371	81	'0015114887
32	'0159485897	82	'0016714957	32	'0152427549	82	'0014477702
33	'0151035665	83	'0016046284	33	'0143106446	83	'0013868224
34	'0143147715	84	'0015405351	34	'0136346858	84	'0013285180
35	'0135773224	85	'0014790927	35	'0129099878	85	'0012727359
36	'0128868780	86	'0014201848	36	'0122322015	86	'0012193611
37	'0122395655	87	'0013637001	37	'0115974477	87	'0011682845
38	'0116319191	88	'0013095329	38	'0110022538	88	'0011194021
39	'0110608274	89	'0012575828	39	'0104435029	89	'0010726152
40	'0105234893	90	'0012077538	40	'0099183887	90	'0010278300
41	'0100173765	91	'0011599547	41	'0094243778	91	'0009849569
42	'0095402007	92	'0011140984	42	'0089591781	92	'0009439110
43	'0090898859	93	'0010701020	43	'0085207094	93	'0009046112
44	'0086645444	94	'0010278867	44	'0081070805	94	'0008669802
45	'0082624558	95	'0009873767	45	'0077165675	95	'0008309447
46	'0078820488	96	'0009485002	46	'0073544897	96	'0007964344
47	'0075218855	97	'0009111884	47	'0069987268	97	'0007633827
48	'0071806476	98	'0008753757	48	'0066686377	98	'0007317257
49	'0068571240	99	'0008409996	49	'0063561161	99	'0007014029
50	'0065502004	100	'0008080000	50	'0060600458	100	'0006723562

Redemption Fund necessary to produce £1 in n years at the following rates per cent.

Years	4½ per cent.	Years	4½ per cent.	Years	5 per cent.	Years	5 per cent.
1	1'0000000000	51	'0053323191	1	1'0000000000	51	'0045286697
2	'4889975550	52	'0050767923	2	'4878048780	52	'0042944966
3	'3107733582	53	'0048346867	3	'3172085646	53	'0040733368
4	'2337430479	54	'0046051886	4	'2320118326	54	'0038643770
5	'1827916395	55	'0043875437	5	'1809747981	55	'0036668637
6	'1488783875	56	'0041810518	6	'1470174681	56	'0034800978
7	'1247014680	57	'0039850622	7	'1228198184	57	'0033034300
8	'1066096533	58	'0037989695	8	'1047218136	58	'0031362568
9	'0925744700	59	'0036222094	9	'0906908000	59	'0029780161
10	'0813788217	60	'0034542558	10	'0795045750	60	'0028281845
11	'0722481817	61	'0032946176	11	'0703888915	61	'0026862736
12	'0646661886	62	'0031428356	12	'0628254100	62	'0025518273
13	'0582753528	63	'0029984802	13	'0564557652	63	'0024244196
14	'0528203160	64	'0028611494	14	'0510239695	64	'00233036520
15	'0481138081	65	'0027304661	15	'0463422876	65	'0021891514
16	'0440153695	66	'0026060769	16	'0422699080	66	'0020805683
17	'0404175833	67	'0024876496	17	'0386991417	67	'0019775751
18	'0372368975	68	'0023748725	18	'0355462223	68	'0018798643
19	'0344073443	69	'0022674523	19	'0327450104	69	'0017871473
20	'0318761443	70	'0021651129	20	'0302425872	70	'0016991530
21	'0296005669	71	'0020675946	21	'0279961071	71	'0016156265
22	'0275456461	72	'0019746524	22	'0259705086	72	'0015363280
23	'0256824930	73	'0018860556	23	'0241368219	73	'0014610318
24	'0239870299	74	'0018015863	24	'0224709007	74	'0013895254
25	'0224390280	75	'0017210390	25	'0209524573	75	'0013216085
26	'0210213675	76	'0016442194	26	'0195643207	76	'0012570925
27	'0197194616	77	'0015709439	27	'0182981599	77	'0011957993
28	'0185208051	78	'0015010391	28	'0171225304	78	'0011375610
29	'0174146147	79	'0014343408	29	'0160455149	79	'0011061609
30	'0163915429	80	'0013706935	30	'0150514351	80	'0010296235
31	'0154434459	81	'0013099502	31	'0141321204	81	'0009796332
32	'0145631962	82	'0012519715	32	'0132804189	82	'0009321143
33	'0137445281	83	'0011966252	33	'0124900437	83	'0008869406
34	'0129819119	84	'0011437861	34	'0117554454	84	'0008439924
35	'0122704478	85	'0010933355	35	'0110717072	85	'0008031567
36	'0116057796	86	'0010451606	36	'0104344571	86	'0007643265
37	'0109840206	87	'0009915434	37	'0098397945	87	'0007274005
38	'0104016920	88	'0009452152	38	'0092842282	88	'0006922882
39	'0098556712	89	'0009132468	39	'0087646242	89	'0006588825
40	'0093431466	90	'0008731573	40	'0082781611	90	'0006271136
41	'0088615804	91	'0008348597	41	'0078222924	91	'0005968946
42	'0084086759	92	'0007982710	42	'0073947131	92	'0005681481
43	'0079823492	93	'0007633126	43	'0069933328	93	'0005408008
44	'0075807056	94	'0007299095	44	'0066162506	94	'0005147832
45	'0072020184	95	'0006979905	45	'0062617347	95	'0004900295
46	'0068417107	96	'0006674877	46	'0059282036	96	'0004664770
47	'0065073395	97	'0006383364	47	'0056142109	97	'0004440666
48	'0061885821	98	'0006104754	48	'0053184306	98	'0004227418
49	'0058872235	99	'0005838459	49	'0050396453	99	'0004024492
50	'0056021459	100	'0005583922	50	'0047767355	100	'0003831381

Redemption Fund necessary to produce £1 in *n* years at the following rates per cent.

Years	10 per cent.	12 per cent.	15 per cent.	18 per cent.	20 per cent.	Years
1	1'0000000000	1'0000000000	1'0000000000	1'0000000000	1'0000000000	1
2	4761904761	4716981132	4651162790	4587155063	4545454545	2
3	3021148036	2963489805	2879769618	2799238607	2747252747	3
4	2154708037	2092344363	2002653515	1917387036	1862891207	4
5	1637974807	1574097319	1483155524	1397778418	1343797033	5
6	1296073803	1262257184	1142369065	1059101292	1007057459	6
7	1054054997	0991177359	0903603634	0823619993	0774239263	7
8	0874440175	0813028414	0728500896	0652443589	0606094224	8
9	0736405391	0676788887	0599574015	0523948239	0480794617	9
10	0627453949	0569841642	0492520625	0425146413	0385227569	10
11	0539631420	0484154043	0410689830	0347763862	0311037942	11
12	0467633151	0414368076	0344807761	0286278089	0252649649	12
13	0407785238	0357771951	0291104565	0236862073	0206200011	13
14	0357462232	0308712461	0246884898	0196780583	0168930552	14
15	0314737769	0268242396	0210170526	0164027825	0138821198	15
16	02784166207	0233900180	0179476914	0137100839	0114361350	16
17	0246641344	0204567275	0153668623	0114852711	0094401469	17
18	0219302222	0179373114	0131862873	0096894570	0078053857	18
19	0195468682	0157630049	0113863504	0081028390	0063624532	19
20	0174596248	0138787800	0097614704	0068199812	0053865307	20
21	0156243898	0122400915	0084167914	0057464327	0044439388	21
22	0140050629	0108105088	0072657713	0048462577	0036896187	22
23	0125718127	0095599650	0062783947	0040901996	0030652575	23
24	0112997764	0084634417	0054298296	0034542973	0025478730	24
25	0101680722	0074999698	0046994023	0029188261	0021187290	25
26	0091590386	0066518581	0040698058	0024674779	0017624956	26
27	0082576423	0059040937	0035264815	0020867195	0014665923	27
28	0074510132	0052438691	0030571309	0017652846	0012206684	28
29	0067280747	0046602068	0026513265	0014937692	0010161900	29
30	0060792483	0041436576	0022801982	0012643056	0008461085	30
31	0054962193	0036860570	0019961796	0010702987	0007045936	31
32	0049411167	0032803263	0017328006	0009062108	0005868168	32
33	0044994063	0029203096	0015045161	0007673859	0004875834	33
34	0040737064	0026006383	0013065655	0006499044	0004071466	34
35	0036897051	0023166193	0011348546	0005504633	0003391738	35
36	0033430638	0020641406	0009858572	0004662768	0002825649	36
37	0030299405	0018395924	0008565329	0003989937	0002354154	37
38	0027469250	0016397998	0007442569	0003346284	0001961410	38
39	0024909840	0014619665	0006467613	0002835030	0001634241	39
40	0022594144	0013036256	0005620850	0002401991	0001361682	40
41	0020498028	0011625982	0004885308	0002035171	0001134606	41
42	0018599911	0010369577	0004246290	0001724424	0000945416	42
43	0016880466	0009249987	0003691063	0001461163	0000787784	43
44	0015322365	0008252102	0003208590	0001238120	0000656444	44
45	0013910047	0007362523	0002789300	0001049144	0000547007	45
46	0012629527	0006569363	0002424890	0000889026	0000455818	46
47	0011868221	0005862064	0002108156	0000758355	0000379834	47
48	0010414797	0005231248	0001832843	0000638396	0000316518	48
49	0009459041	0004668576	0001593523	0000540984	0000263758	49
50	0008591740	0004166635	0001385480	0000458440	0000219794	50

N.B. The above Table for rates of interest of 10, 12, 15, 18, and 20 per cent. was employed in calculating the Old Present Value Table of £1 per annum given in Table XII., but it is evident that it could not be applied practically for the *Redemption of Capital*.

Redemption Fund necessary to produce £1 in  $n$  years, payments being made Half-yearly and Quarterly, at the following rates per cent.

Years' Duration	3 per cent.		Years' Duration	3 per cent.		Years' Duration	3½ per cent.		Years' Duration	3½ per cent.	
	Redemption Fund. Payments being made			Redemption Fund. Payments being made			Redemption Fund. Payments being made			Redemption Fund. Payments being made	
	Half-yearly	Quarterly		Half-yearly	Quarterly		Half-yearly	Quarterly		Half-yearly	Quarterly
1	·992556	·988820	51	·008413	·008352	1	·991941	·987895	51	·007781	·007718
2	·488890	·487022	52	·008099	·008040	2	·487976	·485954	52	·007478	·007416
3	·321050	·319806	53	·007800	·007743	3	·320046	·318699	53	·007188	·007128
4	·237168	·236235	54	·007514	·007458	4	·236125	·235115	54	·006911	·006853
5	·186868	·186123	55	·007240	·007186	5	·185807	·185000	55	·006647	·006590
6	·153360	·152739	56	·006978	·006925	6	·152291	·151619	56	·006395	·006339
7	·129447	·128915	57	·006728	·006676	7	·128375	·127800	57	·006154	·006100
8	·111530	·111065	58	·006488	·006437	8	·110461	·109958	58	·005923	·005870
9	·097612	·097199	59	·006258	·006208	9	·096546	·096100	59	·005702	·005651
10	·086492	·086121	60	·006037	·005989	10	·085432	·085031	60	·005490	·005441
11	·077407	·077070	61	·005826	·005779	11	·076354	·075990	61	·005288	·005240
12	·069848	·069540	62	·005623	·005577	12	·068804	·068471	62	·005094	·005047
13	·063464	·063180	63	·005428	·005383	13	·062428	·062122	63	·004908	·004862
14	·058002	·057739	64	·005241	·005197	14	·056976	·056692	64	·004730	·004685
15	·053278	·053033	65	·005061	·005019	15	·052262	·051997	65	·004558	·004515
16	·049154	·048925	66	·004888	·004847	16	·048147	·047900	66	·004394	·004352
17	·045524	·045309	67	·004722	·004682	17	·044527	·044295	67	·004237	·004195
18	·042305	·042102	68	·004563	·004523	18	·041319	·041100	68	·004085	·004045
19	·039432	·039241	69	·004409	·004371	19	·038457	·038250	69	·003940	·003901
20	·036854	·036673	70	·004262	·004224	20	·035889	·035694	70	·003800	·003762
21	·034529	·034356	71	·004119	·004083	21	·033575	·033389	71	·003666	·003629
22	·032421	·032257	72	·003982	·003947	22	·031478	·031302	72	·003537	·003501
23	·030503	·030346	73	·003851	·003816	23	·029571	·029403	73	·003413	·003378
24	·028750	·028601	74	·003724	·003689	24	·027829	·027669	74	·003294	·003259
25	·027143	·027001	75	·003601	·003568	25	·026234	·026080	75	·003179	·003146
26	·025666	·025529	76	·003483	·003451	26	·024767	·024620	76	·003069	·003036
27	·024303	·024172	77	·003370	·003338	27	·023415	·023275	77	·002963	·002931
28	·023042	·022916	78	·003260	·003229	28	·022166	·022031	78	·002860	·002829
29	·021873	·021752	79	·003154	·003124	29	·021008	·020878	79	·002762	·002731
30	·020787	·020670	80	·003052	·003023	30	·019933	·019808	80	·002667	·002637
31	·019775	·019663	81	·002954	·002925	31	·018932	·018812	81	·002576	·002547
32	·018831	·018722	82	·002859	·002831	32	·017999	·017883	82	·002488	·002460
33	·017948	·017843	83	·002767	·002740	33	·017127	·017015	83	·002403	·002375
34	·017121	·017020	84	·002679	·002652	34	·016311	·016203	84	·002321	·002294
35	·016345	·016247	85	·002594	·002567	35	·015546	·015442	85	·002243	·002216
36	·015616	·015521	86	·002511	·002485	36	·014828	·014727	86	·002167	·002141
37	·014930	·014838	87	·002432	·002406	37	·014153	·014055	87	·002094	·002069
38	·014283	·014195	88	·002355	·002330	38	·013517	·013423	88	·002023	·001999
39	·013673	·013587	89	·002280	·002256	39	·012918	·012827	89	·001955	·001931
40	·013097	·013014	90	·002208	·002185	40	·012352	·012264	90	·001889	·001866
41	·012552	·012471	91	·002139	·002116	41	·011818	·011732	91	·001826	·001803
42	·012036	·011958	92	·002072	·002050	42	·011312	·011229	92	·001765	·001743
43	·011547	·011471	93	·002007	·001985	43	·010834	·010753	93	·001706	·001685
44	·011083	·011009	94	·001944	·001923	44	·010380	·010302	94	·001649	·001628
45	·010642	·010571	95	·001884	·001863	45	·009950	·009875	95	·001594	·001574
46	·010224	·010154	96	·001825	·001805	46	·009542	·009468	96	·001541	·001521
47	·009826	·009758	97	·001768	·001748	47	·009154	·009083	97	·001490	·001471
48	·009446	·009381	98	·001714	·001694	48	·008785	·008716	98	·001441	·001422
49	·009085	·009021	99	·001661	·001641	49	·008434	·008367	99	·001393	·001375
50	·008741	·008679	100	·001609	·001591	50	·008100	·008034	100	·001347	·001329

Redemption Fund necessary to produce £1 in  $n$  years, payments being made Half-yearly and Quarterly, at the following rates per cent.

Years' Duration	3½ per cent.		Years' Duration	3½ per cent.		Years' Duration	3½ per cent.		Years' Duration	3½ per cent.		Years' Duration	3½ per cent.	
	Redemption Fund. Payments being made Half-yearly	Quarterly		Redemption Fund. Payments being made Half-yearly	Quarterly		Redemption Fund. Payments being made Half-yearly	Quarterly		Redemption Fund. Payments being made Half-yearly	Quarterly		Redemption Fund. Payments being made Half-yearly	Quarterly
1	991326	986970	51	007189	007123	1	990712	986047	51	006636	006568	1	990712	986047
2	487065	484888	52	006896	006832	2	486155	483823	52	006353	006287	2	486155	483823
3	319045	317594	53	006616	006554	3	318047	316493	53	006084	006019	3	318047	316493
4	235086	233999	54	006350	006289	4	234051	232887	54	005827	005765	4	234051	232887
5	184751	183882	55	006066	006037	5	183699	182769	55	005583	005523	5	183699	182769
6	151228	150504	56	005853	005796	6	150170	149396	56	005350	005292	6	150170	149396
7	127311	126692	57	005621	005566	7	126254	125591	57	005129	005072	7	126254	125591
8	109399	108858	58	005400	005346	8	108346	107767	58	004917	004862	8	108346	107767
9	095490	095010	59	005189	005136	9	094443	093929	59	004715	004661	9	094443	093929
10	084382	083951	60	004986	004935	10	083343	082882	60	004522	004470	10	083343	082882
11	075313	074922	61	004793	004743	11	074282	073864	61	004338	004288	11	074282	073864
12	067771	067414	62	004608	004560	12	066751	066368	62	004163	004113	12	066751	066368
13	061405	061076	63	004431	004384	13	060396	060044	63	003995	003947	13	060396	060044
14	055963	055658	64	004262	004216	14	054964	054639	64	003834	003788	14	054964	054639
15	051260	050976	65	004099	004055	15	050272	049969	65	003680	003635	15	050272	049969
16	047156	046891	66	003944	003900	16	046181	045898	66	003534	003490	16	046181	045898
17	043547	043298	67	003795	003752	17	042584	042319	67	003393	003351	17	042584	042319
18	040350	040116	68	003652	003611	18	039399	039150	68	003259	003217	18	039399	039150
19	037500	037279	69	003515	003475	19	036561	036326	69	003130	003090	19	036561	036326
20	034944	034735	70	003383	003344	20	034018	033796	70	003007	002968	20	034018	033796
21	032641	032443	71	003257	003219	21	031728	031517	71	002888	002851	21	031728	031517
22	030556	030368	72	003136	003099	22	029656	029455	72	002775	002739	22	029656	029455
23	028661	028481	73	003020	002984	23	027773	027582	73	002667	002631	23	027773	027582
24	026931	026760	74	002908	002874	24	026065	025874	74	002563	002522	24	026065	025874
25	025348	025184	75	002801	002767	25	024486	024312	75	002463	002430	25	024486	024312
26	023893	023737	76	002698	002665	26	023044	022878	76	002368	002335	26	023044	022878
27	022553	022403	77	002599	002567	27	021717	021558	77	002276	002244	27	021717	021558
28	021316	021172	78	002505	002473	28	020492	020340	78	002188	002157	28	020492	020340
29	020170	020032	79	002413	002383	29	019359	019213	79	002104	002074	29	019359	019213
30	019107	018974	80	002325	002296	30	018308	018168	80	002023	001994	30	018308	018168
31	018118	017990	81	002241	002212	31	017332	017197	81	001946	001917	31	017332	017197
32	017196	017074	82	002160	002132	32	016423	016293	82	001871	001844	32	016423	016293
33	016336	016218	83	002082	002055	33	015575	015450	83	001800	001773	33	015575	015450
34	015532	015418	84	002007	001980	34	014783	014663	84	001731	001705	34	014783	014663
35	014779	014668	85	001935	001909	35	014042	013926	85	001665	001640	35	014042	013926
36	014072	013966	86	001865	001840	36	013348	013236	86	001602	001577	36	013348	013236
37	013408	013306	87	001798	001774	37	012696	012588	87	001541	001517	37	012696	012588
38	012784	012685	88	001734	001710	38	012084	011980	88	001482	001459	38	012084	011980
39	012196	012100	89	001672	001649	39	011508	011407	89	001426	001404	39	011508	011407
40	011642	011549	90	001612	001590	40	010965	010868	90	001372	001351	40	010965	010868
41	011119	011029	91	001555	001533	41	010454	010360	91	001321	001299	41	010454	010360
42	010625	010537	92	001500	001478	42	009971	009880	92	001271	001250	42	009971	009880
43	010157	010073	93	001446	001425	43	009515	009427	93	001223	001203	43	009515	009427
44	009715	009633	94	001395	001375	44	009084	008999	94	001177	001157	44	009084	008999
45	009295	009216	95	001346	001326	45	008676	008594	95	001133	001114	45	008676	008594
46	008898	008821	96	001298	001279	46	008290	008210	96	001090	001072	46	008290	008210
47	008520	008446	97	001252	001233	47	007924	007846	97	001049	001031	47	007924	007846
48	008162	008090	98	001208	001190	48	007576	007501	98	001010	000993	48	007576	007501
49	007822	007751	99	001165	001148	49	007247	007174	99	000972	000955	49	007247	007174
50	007498	007430	100	001124	001107	50	006933	006863	100	000936	000920	50	006933	006863

TABLE V.

Redemption Fund necessary to produce £1 in  $n$  years, payments being made Half-yearly and Quarterly, at the following rates per cent.

Years' Duration	4 per cent.		Years' Duration	4 per cent.		Years' Duration	4½ per cent.		Years' Duration	4½ per cent.	
	Redemption Fund. Payments being made			Redemption Fund. Payments being made			Redemption Fund. Payments being made			Redemption Fund. Payments being made	
	Half-yearly	Quarterly		Half-yearly	Quarterly		Half-yearly	Quarterly		Half-yearly	Quarterly
1	·990099	·985124	51	·006199	·006049	1	·989487	·984203	51	·005636	·005565
2	·485248	·482761	52	·005846	·005779	2	·484342	·481701	52	·005375	·005306
3	·317052	·315395	53	·005588	·005522	3	·316059	·314300	53	·005127	·005060
4	·233020	·231778	54	·005342	·005278	4	·231992	·230674	54	·004891	·004827
5	·182653	·181661	55	·005108	·005046	5	·181612	·180559	55	·004668	·004605
6	·149119	·148294	56	·004885	·004825	6	·148074	·147198	56	·004456	·004395
7	·125204	·124498	57	·004673	·004615	7	·124161	·123411	57	·004254	·004195
8	·107300	·106684	58	·004472	·004416	8	·106263	·105608	58	·004062	·004005
9	·093404	·092857	59	·004279	·004225	9	·092375	·091795	59	·003879	·003824
10	·082313	·081822	60	·004096	·004043	10	·081294	·080773	60	·003706	·003653
11	·073263	·072818	61	·003922	·003870	11	·072254	·071782	61	·003540	·003489
12	·065742	·065335	62	·003755	·003705	12	·064746	·064314	62	·003383	·003333
13	·059399	·059024	63	·003596	·003548	13	·058414	·058018	63	·003233	·003185
14	·053979	·053633	64	·003444	·003398	14	·053008	·052641	64	·003090	·003044
15	·049300	·048978	65	·003300	·003254	15	·048342	·048001	65	·002954	·002909
16	·045221	·044921	66	·003161	·003118	16	·044277	·043959	66	·002824	·002781
17	·041637	·041356	67	·003029	·002987	17	·040707	·040409	67	·002701	·002658
18	·038466	·038201	68	·002903	·002862	18	·037550	·037270	68	·002583	·002542
19	·035641	·035391	69	·002783	·002743	19	·034739	·034475	69	·002470	·002431
20	·033112	·032875	70	·002667	·002629	20	·032224	·031975	70	·002363	·002324
21	·030835	·030641	71	·002557	·002520	21	·029961	·029725	71	·002260	·002223
22	·028776	·028564	72	·002452	·002415	22	·027917	·027693	72	·002162	·002127
23	·026907	·026705	73	·002351	·002316	23	·026062	·025850	73	·002069	·002034
24	·025204	·025011	74	·002255	·002220	24	·024373	·024171	74	·001980	·001946
25	·023646	·023463	75	·002162	·002129	25	·022830	·022637	75	·001895	·001862
26	·022218	·022043	76	·002074	·002042	26	·021416	·021232	76	·001813	·001782
27	·020905	·020737	77	·001989	·001958	27	·020117	·019941	77	·001736	·001705
28	·019693	·019533	78	·001908	·001878	28	·018920	·018751	78	·001661	·001632
29	·018573	·018420	79	·001831	·001802	29	·017814	·017653	79	·001590	·001562
30	·017536	·017388	80	·001757	·001728	30	·016790	·016636	80	·001522	·001495
31	·016573	·016431	81	·001686	·001658	31	·015841	·015693	81	·001458	·001431
32	·015677	·015541	82	·001618	·001591	32	·014959	·014817	82	·001396	·001370
33	·014842	·014712	83	·001552	·001526	33	·014138	·014002	83	·001336	·001311
34	·014064	·013938	84	·001490	·001465	34	·013373	·013241	84	·001280	·001255
35	·013335	·013214	85	·001430	·001405	35	·012658	·012532	85	·001225	·001202
36	·012654	·012537	86	·001372	·001349	36	·011990	·011868	86	·001174	·001151
37	·012015	·011902	87	·001317	·001294	37	·011364	·011247	87	·001124	·001102
38	·011415	·011306	88	·001265	·001242	38	·010777	·010664	88	·001077	·001055
39	·010852	·010747	89	·001214	·001192	39	·010226	·010118	89	·001031	·001011
40	·010321	·010220	90	·001166	·001145	40	·009709	·009604	90	·000988	·000968
41	·009822	·009724	91	·001119	·001099	41	·009223	·009122	91	·000946	·000927
42	·009352	·009257	92	·001074	·001055	42	·008764	·008667	92	·000906	·000888
43	·008908	·008816	93	·001032	·001012	43	·008333	·008239	93	·000868	·000850
44	·008488	·008400	94	·000991	·000972	44	·007926	·007835	94	·000832	·000814
45	·008092	·008007	95	·000951	·000933	45	·007541	·007454	95	·000797	·000780
46	·007717	·007635	96	·000913	·000896	46	·007178	·007093	96	·000763	·000747
47	·007362	·007283	97	·000877	·000860	47	·006835	·006753	97	·000731	·000716
48	·007026	·006949	98	·000842	·000826	48	·006510	·006431	98	·000701	·000686
49	·006708	·006633	99	·000809	·000793	49	·006203	·006127	99	·000672	·000657
50	·006406	·006333	100	·000777	·000762	50	·005912	·005838	100	·000643	·000629



Redemption Fund necessary to produce £1 in *n* years, payments being made Half-yearly and Quarterly, at the following rates per cent.

Years' Duration	4½ per cent.		Years' Duration	4½ per cent.		Years' Duration	4½ per cent.		Years' Duration	4½ per cent.		Years' Duration	4½ per cent.	
	Redemption Fund. Payments being made			Redemption Fund. Payments being made			Redemption Fund. Payments being made			Redemption Fund. Payments being made				
	Half-yearly	Quarterly		Half-yearly	Quarterly		Half-yearly	Quarterly		Half-yearly	Quarterly			
1	·988875	·983282	51	·005187	·005115	1	·988264	·982363	51	·004770	·004696	1	·004770	·004696
2	·483438	·480643	52	·004937	·004867	2	·482536	·479587	52	·004530	·004459	2	·004530	·004459
3	·315070	·313208	53	·004699	·004632	3	·314084	·312119	53	·004303	·004235	3	·004303	·004235
4	·230969	·229575	54	·004475	·004409	4	·229950	·228479	54	·004089	·004024	4	·004089	·004024
5	·180575	·179461	55	·004261	·004198	5	·179544	·178369	55	·003886	·003823	5	·003886	·003823
6	·147035	·146108	56	·004059	·003998	6	·146002	·145024	56	·003694	·003633	6	·003694	·003633
7	·123125	·122332	57	·003867	·003809	7	·122095	·121260	57	·003512	·003453	7	·003512	·003453
8	·105233	·104541	58	·003685	·003628	8	·104212	·103483	58	·003340	·003283	8	·003340	·003283
9	·091354	·090741	59	·003512	·003457	9	·090343	·089697	59	·003176	·003122	9	·003176	·003122
10	·080284	·079734	60	·003348	·003295	10	·079284	·078705	60	·003021	·002969	10	·003021	·002969
11	·071256	·070758	61	·003192	·003141	11	·070269	·069745	61	·002874	·002824	11	·002874	·002824
12	·063761	·063305	62	·003044	·002994	12	·062787	·062308	62	·002735	·002686	12	·002735	·002686
13	·057443	·057024	63	·002903	·002855	13	·056484	·056044	63	·002603	·002556	13	·002603	·002556
14	·052051	·051664	64	·002768	·002722	14	·051107	·050700	64	·002477	·002432	14	·002477	·002432
15	·047399	·047039	65	·002641	·002596	15	·046470	·046092	65	·002358	·002314	15	·002358	·002314
16	·043348	·043013	66	·002520	·002476	16	·042435	·042083	66	·002245	·002202	16	·002245	·002202
17	·039793	·039479	67	·002404	·002362	17	·038895	·038566	67	·002137	·002096	17	·002137	·002096
18	·036650	·036356	68	·002294	·002254	18	·035768	·035459	68	·002035	·001996	18	·002035	·001996
19	·033855	·033578	69	·002189	·002151	19	·032989	·032698	69	·001938	·001900	19	·001938	·001900
20	·031355	·031093	70	·002090	·002052	20	·030504	·030230	70	·001845	·001809	20	·001845	·001809
21	·029107	·028860	71	·001995	·001958	21	·028260	·028014	71	·001758	·001722	21	·001758	·001722
22	·027078	·026843	72	·001904	·001869	22	·026259	·026014	72	·001674	·001640	22	·001674	·001640
23	·025238	·025016	73	·001818	·001784	23	·024436	·024203	73	·001595	·001562	23	·001595	·001562
24	·023565	·023353	74	·001736	·001703	24	·022778	·022556	74	·001519	·001488	24	·001519	·001488
25	·022037	·021835	75	·001657	·001626	25	·021265	·021055	75	·001448	·001417	25	·001448	·001417
26	·020638	·020445	76	·001583	·001552	26	·019882	·019681	76	·001379	·001350	26	·001379	·001350
27	·019353	·019169	77	·001512	·001482	27	·018613	·018422	77	·001314	·001286	27	·001314	·001286
28	·018171	·017995	78	·001444	·001415	28	·017446	·017263	78	·001252	·001225	28	·001252	·001225
29	·017080	·016911	79	·001379	·001351	29	·016370	·016195	79	·001194	·001167	29	·001194	·001167
30	·016071	·015910	80	·001317	·001291	30	·015376	·015209	80	·001138	·001112	30	·001138	·001112
31	·015136	·014982	81	·001258	·001233	31	·014457	·014297	81	·001084	·001060	31	·001084	·001060
32	·014268	·014120	82	·001202	·001177	32	·013604	·013451	82	·001033	·001010	32	·001033	·001010
33	·013461	·013320	83	·001148	·001124	33	·012812	·012665	83	·000985	·000962	33	·000985	·000962
34	·012710	·012574	84	·001097	·001074	34	·012075	·011934	84	·000939	·000917	34	·000939	·000917
35	·012009	·011878	85	·001048	·001026	35	·011388	·011253	85	·000895	·000874	35	·000895	·000874
36	·011355	·011229	86	·001002	·000980	36	·010748	·010618	86	·000853	·000833	36	·000853	·000833
37	·010742	·010621	87	·000957	·000936	37	·010150	·010025	87	·000813	·000794	37	·000813	·000794
38	·010169	·010053	88	·000915	·000894	38	·009590	·009470	88	·000776	·000757	38	·000776	·000757
39	·009632	·009520	89	·000874	·000855	39	·009066	·008951	89	·000739	·000721	39	·000739	·000721
40	·009128	·009020	90	·000835	·000817	40	·008576	·008465	90	·000705	·000688	40	·000705	·000688
41	·008654	·008550	91	·000798	·000780	41	·008115	·008009	91	·000672	·000655	41	·000672	·000655
42	·008208	·008108	92	·000763	·000745	42	·007683	·007580	92	·000641	·000625	42	·000641	·000625
43	·007789	·007693	93	·000729	·000712	43	·007276	·007178	93	·000611	·000596	43	·000611	·000596
44	·007395	·007302	94	·000697	·000681	44	·006894	·006799	94	·000583	·000568	44	·000583	·000568
45	·007023	·006933	95	·000666	·000650	45	·006535	·006443	95	·000556	·000541	45	·000556	·000541
46	·006672	·006585	96	·000637	·000622	46	·006196	·006108	96	·000530	·000516	46	·000530	·000516
47	·006340	·006257	97	·000609	·000594	47	·005877	·005792	97	·000505	·000492	47	·000505	·000492
48	·006027	·005947	98	·000582	·000568	48	·005575	·005494	98	·000482	·000469	48	·000482	·000469
49	·005732	·005654	99	·000556	·000543	49	·005291	·005213	99	·000460	·000447	49	·000460	·000447
50	·005452	·005377	100	·000532	·000519	50	·005023	·004947	100	·000438	·000426	50	·000438	·000426

Redemption Fund necessary to produce £1 in *n* years, payments being made Half-yearly and Quarterly, at the following rates per cent.

Years' Duration	5 per cent.		Years' Duration	5 per cent.		Years' Duration	5 per cent.		Years' Duration	5 per cent.	
	Redemption Fund. Payments being made			Redemption Fund. Payments being made			Redemption Fund. Payments being made			Redemption Fund. Payments being made	
	Half-yearly	Quarterly		Half-yearly	Quarterly		Half-yearly	Quarterly		Half-yearly	Quarterly
1	·987654	·981444	26	·019149	·018941	51	·004381	·004308	76	·001200	·001172
2	·481636	·478533	27	·017896	·017697	52	·004153	·004082	77	·001141	·001114
3	·313100	·311033	28	·016745	·016555	53	·003937	·003869	78	·001085	·001059
4	·228935	·227387	29	·015685	·015504	54	·003733	·003668	79	·001032	·001007
5	·178518	·177282				55	·003540	·003478			
6	·144974	·143947	30	·014707	·014534	56	·003358	·003298	80	·000981	·000957
7	·121073	·120195	31	·013803	·013637	57	·003186	·003128	81	·000933	·000910
8	·103198	·102432	32	·012965	·012807	58	·003023	·002967	82	·000887	·000865
9	·089340	·088661	33	·012188	·012037	59	·002869	·002815	83	·000844	·000822
10	·078294	·077686	34	·011466	·011321	60	·002724	·002672	84	·000802	·000782
			35	·010794	·010655				85	·000763	·000743
11	·069293	·068742	36	·010168	·010035	61	·002586	·002536	86	·000726	·000707
12	·061826	·061323	37	·009584	·009457	62	·002455	·002407	87	·000690	·000672
13	·055538	·055076	38	·009039	·008916	63	·002331	·002285	88	·000657	·000639
14	·050176	·049750	39	·008529	·008412	64	·002214	·002169	89	·000625	·000608
15	·045555	·045160	40	·008052	·007939	65	·002103	·002060	90	·000594	·000578
16	·041537	·041168				66	·001997	·001956			
17	·038014	·037969	41	·007605	·007497	67	·001897	·001858	91	·000565	·000549
18	·034903	·034580	42	·007186	·007082	68	·001803	·001764	92	·000538	·000523
19	·032140	·031836	43	·006793	·006692	69	·001713	·001676	93	·000511	·000497
20	·029673	·029386	44	·006423	·006327	70	·001628	·001592	94	·000487	·000473
			45	·006076	·005984				95	·000463	·000450
21	·027458	·027187	46	·005750	·005661	71	·001547	·001513	96	·000440	·000428
22	·025461	·025205	47	·005443	·005357	72	·001470	·001437	97	·000419	·000407
23	·023654	·023411	48	·005153	·005071	73	·001397	·001366	98	·000399	·000387
24	·022012	·021782	49	·004881	·004801	74	·001328	·001298	99	·000379	·000368
25	·020516	·020297	50	·004624	·004548	75	·001263	·001233	100	·000361	·000350



**TABLE VI.**  
**FOR**  
**VALUING MINERAL AND OTHER PROPERTIES.**



TABLE VI.

Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at  $2\frac{1}{2}$  per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	$3\frac{1}{2}$ per cent.	Years	$3\frac{1}{2}$ per cent.	Years	4 per cent.	Years	4 per cent.
1	0.96618357	51	22.26740253	1	0.96153846	51	20.03658861
2	1.89097701	52	22.43436985	2	1.87326550	52	20.17167569
3	2.77671979	53	22.59657501	3	2.73869682	53	20.30271581
4	3.62558079	54	22.75417147	4	3.56102684	54	20.42984993
5	4.43957354	55	22.90730687	5	4.34316454	55	20.55321308
6	5.22056984	56	23.05612326	6	5.08776468	56	20.67293462
7	5.97031216	57	23.20075737	7	5.79725504	57	20.78913857
8	6.69042456	58	23.34134075	8	6.47386019	58	20.90194379
9	7.38242257	59	23.47800014	9	7.11962227	59	20.81146433
10	8.04772215	60	23.61085761	10	7.73641938	60	21.11780963
11	8.68764777	61	23.74003086	11	8.32598178	61	21.22108482
12	9.30343965	62	23.86563316	12	8.88990612	62	21.32139072
13	9.89626037	63	23.98777393	13	9.42966812	63	21.41882435
14	10.46720091	64	24.10655857	14	9.94663383	64	21.51347888
15	11.01728593	65	24.22208884	15	10.44206960	65	21.60544393
16	11.54747897	66	24.33446278	16	10.91715111	66	21.69480559
17	12.05868675	67	24.44377517	17	11.37297126	67	21.78164679
18	12.55176339	68	24.55011744	18	11.81054741	68	21.86604730
19	13.02751416	69	24.65357791	19	12.23082775	69	21.94808392
20	13.48666891	70	24.75424187	20	12.63469713	70	22.02783063
21	13.93003527	71	24.85219178	21	13.02298226	71	22.10535871
22	14.35820146	72	24.94750720	22	13.39645636	72	22.18073675
23	14.77183903	73	25.04026512	23	13.75584350	73	22.25403995
24	15.17155533	74	25.13053996	24	14.10182243	74	22.32530510
25	15.55792567	75	25.21840367	25	14.43503005	75	22.39462074
26	15.93149544	76	25.30392583	26	14.75606456	76	22.46203721
27	16.29278205	77	25.38717376	27	15.06548845	77	22.52761178
28	16.64227669	78	25.46821272	28	15.36383105	78	22.59139983
29	16.98044595	79	25.54710557	29	15.65159098	79	22.65345459
30	17.30773337	80	25.62391340	30	15.92923832	80	22.71382764
31	17.62456084	81	25.69869536	31	16.19721669	81	22.77256882
32	17.93132983	82	25.77150857	32	16.45594495	82	22.82972616
33	18.22842269	83	25.84240844	33	16.70581904	83	22.88534613
34	18.51620375	84	25.91144861	34	16.94721347	84	22.93947365
35	18.79502035	85	25.97868115	35	17.18048273	85	22.99215220
36	19.06520381	86	26.04415633	36	17.40596268	86	23.04342368
37	19.32707041	87	26.10792307	37	17.62397170	87	23.09332881
38	19.58092210	88	26.17002861	38	17.83481179	88	23.14190680
39	19.82704736	89	26.23051889	39	18.03876966	89	23.18919571
40	20.06572202	90	26.28943832	40	18.23611768	90	23.23523253
41	20.29720981	91	26.34683006	41	18.42711474	91	23.28005217
42	20.52176308	92	26.40273591	42	18.61200708	92	23.32368980
43	20.73962342	93	26.45719651	43	18.79102908	93	23.36917861
44	20.95102212	94	26.51025117	44	18.96440389	94	23.40755090
45	21.15618084	95	26.56193812	45	19.13234417	95	23.44783801
46	21.35531202	96	26.61229435	46	19.29305267	96	23.48707021
47	21.54861933	97	26.66135594	47	19.45272274	97	23.52527702
48	21.73629820	98	26.70915766	48	19.60553899	98	23.56248679
49	21.91853623	99	26.75573351	49	19.75367772	99	23.59872722
50	22.09551334	100	26.80111636	50	19.89730725	100	23.63402508

Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at  $2\frac{1}{2}$  per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	4½ per cent.	Years	4½ per cent.	Years	5 per cent.	Years	5 per cent.
1	0.95693779	51	18.21205168	1	0.95238095	51	16.69206768
2	1.85588269	52	18.32358828	2	1.83881952	52	16.78571558
3	2.70170112	53	18.43165277	3	2.66569161	53	16.87635701
4	3.49873146	54	18.53637330	4	3.43857815	54	16.96410810
5	4.25085376	55	18.62787228	5	4.16238530	55	17.04907945
6	4.96154872	56	18.73626655	6	4.84144343	56	17.13137638
7	5.63394788	57	18.83166781	7	5.47958028	57	17.21109929
8	6.27087631	58	18.92418277	8	6.08023432	58	17.28834387
9	6.87488920	59	19.01391350	9	6.64642212	59	17.36320145
10	7.44830339	60	19.10095769	10	7.18087665	60	17.43575920
11	7.99322457	61	19.18540887	11	7.68604322	61	17.50610040
12	8.51157080	62	19.26735653	12	8.16412323	62	17.57433045
13	9.00509293	63	19.34688653	13	8.61710383	63	17.64044782
14	9.47539253	64	19.42408108	14	9.04678341	64	17.70460288
15	9.92393738	65	19.49901911	15	9.45479348	65	17.76683941
16	10.35207526	66	19.57177619	16	9.84261767	66	17.82722400
17	10.76104593	67	19.64242497	17	10.21160801	67	17.88582053
18	11.15199177	68	19.71103516	18	10.56299936	68	17.94269018
19	11.52596716	69	19.77767371	19	10.89792172	69	17.99789158
20	11.88394679	70	19.84240495	20	11.21741130	70	18.05148098
21	12.22683311	71	19.90529075	21	11.52241960	71	18.10351236
22	12.55546282	72	19.96639050	22	11.81382275	72	18.15403749
23	12.87061282	73	20.02576138	23	12.09242802	73	18.20310609
24	13.17300551	74	20.08345842	24	12.35898089	74	18.25076593
25	13.46331338	75	20.13953456	25	12.61417072	75	18.29706290
26	13.74216331	76	20.19404074	26	12.85863594	76	18.34204111
27	14.01014041	77	20.24702607	27	13.09296875	77	18.38574298
28	14.26779137	78	20.29853790	28	13.31771918	78	18.42820937
29	14.51562764	79	20.34862170	29	13.53339876	79	18.46947945
30	14.75412820	80	20.39732142	30	13.74048390	80	18.50959103
31	14.98374210	81	20.44467947	31	13.93941882	81	18.54858055
32	15.20489072	82	20.49073663	32	14.13061819	82	18.58648299
33	15.41796996	83	20.53553231	33	14.31446964	83	18.62333211
34	15.62335205	84	20.57910452	34	14.49133585	84	18.65916045
35	15.82138737	85	20.62149001	35	14.66155654	85	18.69399940
36	16.01240598	86	20.66272415	36	14.82545033	86	18.72787914
37	16.19671910	87	20.70284121	37	14.98331628	87	18.76082890
38	16.37462043	88	20.74187420	38	15.13543538	88	18.79287677
39	16.54638731	89	20.77985508	39	15.28207191	89	18.82404993
40	16.71228198	90	20.81681467	40	15.42347469	90	18.85437457
41	16.87255244	91	20.85278281	41	15.55987814	91	18.88387599
42	17.02743351	92	20.88778832	42	15.69150336	92	18.91257863
43	17.17714768	93	20.92185912	43	15.81855905	93	18.94050612
44	17.32190580	94	20.95502216	44	15.94124232	94	18.96768125
45	17.46190800	95	20.98730354	45	16.05973953	95	18.99412609
46	17.59734425	96	21.01872846	46	16.17422704	96	19.01986190
47	17.72839498	97	21.04932143	47	16.28487178	97	19.04490934
48	17.85523177	98	21.07910600	48	16.39183198	98	19.06928826
49	17.97801787	99	21.10810515	49	16.49525768	99	19.09301799
50	18.09690851	100	21.13634101	50	16.59529118	100	19.11611716

TABLE VI.

Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at  $2\frac{1}{2}$  per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	5½ per cent.	Years	5½ per cent.	Years	6 per cent.	Years	6 per cent.
1	0.94786729	51	15.40625632	1	0.94339622	51	14.30437219
2	1.82206726	52	15.48599780	2	1.80561748	52	14.37308963
3	2.63062938	53	15.56311369	3	2.59647753	53	14.43949609
4	3.38045830	54	15.63770916	4	3.32427051	54	14.50368696
5	4.07752417	55	15.70988414	5	3.99605413	55	14.56575270
6	4.72701554	56	15.77973360	6	4.61787178	56	14.62577911
7	5.33346334	57	15.84734790	7	5.19492853	57	14.68384768
8	5.90084182	58	15.91281296	8	5.73173161	58	14.74003580
9	6.43265153	59	15.97621063	9	6.23220356	59	14.79441702
10	6.93198790	60	16.03761889	10	6.69977413	60	14.84706133
11	7.40159821	61	16.09711210	11	7.13745532	61	14.89803537
12	7.84392921	62	16.15476111	12	7.54790311	62	14.94740253
13	8.26116715	63	16.21063363	13	7.93346860	63	14.99522328
14	8.65527158	64	16.26479426	14	8.29624050	64	15.04155525
15	9.02800393	65	16.31730474	15	8.63808079	65	15.08645345
16	9.38095204	66	16.36822402	16	8.96065468	66	15.12997030
17	9.71555102	67	16.41760854	17	9.26545597	67	15.17215595
18	10.03310116	68	16.46551225	18	9.55382852	68	15.21305826
19	10.33478341	69	16.51198683	19	9.82698462	69	15.25272302
20	10.62167284	70	16.55708174	20	10.08602078	70	15.29119400
21	10.89475019	71	16.60084440	21	10.33193114	71	15.32851310
22	11.15491199	72	16.64332019	22	10.56561923	72	15.36472039
23	11.40297948	73	16.68455267	23	10.78790801	73	15.39985427
24	11.63970635	74	16.72458362	24	10.99954876	74	15.43395155
25	11.86578550	75	16.76345312	25	11.20122862	75	15.46704749
26	12.08185506	76	16.80119964	26	11.39357731	76	15.49917590
27	12.28850378	77	16.83786014	27	11.57717310	77	15.53036921
28	12.48627562	78	16.87347017	28	11.75254786	78	15.56065862
29	12.67567400	79	16.90806377	29	11.92019168	79	15.59007395
30	12.85716552	80	16.94167377	30	12.08055692	80	15.61864392
31	13.03118321	81	16.97433175	31	12.23406172	81	15.64639615
32	13.19812955	82	17.00606802	32	12.38109319	82	15.67335713
33	13.35837908	83	17.03691178	33	12.52201028	83	15.69955234
34	13.51228085	84	17.06689115	34	12.65714627	84	15.72500630
35	13.66016047	85	17.09603323	35	12.78681102	85	15.74974261
36	13.80232212	86	17.12433604	36	12.911129300	86	15.77378395
37	13.93905028	87	17.15190877	37	13.03086114	87	15.79715221
38	14.07061124	88	17.17869160	38	13.14576640	88	15.81986840
39	14.19725458	89	17.20473589	39	13.25624328	89	15.84195282
40	14.31921448	90	17.23006415	40	13.36251116	90	15.86342500
41	14.43671083	91	17.25469809	41	13.46477548	91	15.88430376
42	14.54995038	92	17.27865867	42	13.56322885	92	15.90460727
43	14.65912762	93	17.30196614	43	13.65805203	93	15.92435306
44	14.76442586	94	17.32464001	44	13.74941479	94	15.94355799
45	14.86601767	95	17.34669914	45	13.83747680	95	15.96223840
46	14.96406603	96	17.36816171	46	13.92238834	96	15.98040999
47	15.05872477	97	17.38904537	47	14.00429096	97	15.99808799
48	15.15013929	98	17.40936707	48	14.08331813	98	16.01528701
49	15.23844712	99	17.42914326	49	14.15959586	99	16.03202128
50	15.32377836	100	17.44838984	50	14.23324305	100	16.04830447



Present Value of £1 per Annum in n years; Redemption of Capital being at 2½ per cent. with interest allowed to a Purchaser at the following rates, per cent.

Years	7 per cent.	Years	7 per cent.	Years	8 per cent.	Years	8 per cent.
1	0·93457943	51	12·51428263	1	0·92592592	51	11·12239472
2	1·77359317	52	12·56684564	2	1·74268503	52	11·16389606
3	2·53076674	53	12·61758098	3	2·46829983	53	11·20391760
4	3·21731815	54	12·66656764	4	3·11703327	54	11·24252554
5	3·84250553	55	12·71388033	5	3·70032051	55	11·27978231
6	4·41403720	56	12·75958971	6	4·22743658	56	11·31574684
7	4·93838306	57	12·80376268	7	4·70598357	57	11·35047483
8	5·42101366	58	12·84646261	8	5·14225150	58	11·38401888
9	5·86658598	59	12·88774960	9	5·54148972	59	11·41642884
10	6·27908933	60	12·92768066	10	5·90811360	60	11·44775186
11	6·66196084	61	12·96630993	11	6·24586384	61	11·47803265
12	7·01817785	62	13·00368882	12	6·55793062	62	11·50731357
13	7·35033229	63	13·03986622	13	6·84705127	63	11·53556348
14	7·66069114	64	13·07488865	14	7·11558793	64	11·56303474
15	7·95124575	65	13·10880038	15	7·36558962	65	11·58954948
16	8·22375261	66	13·14164354	16	7·59884259	66	11·61521357
17	8·47976690	67	13·17345831	17	7·81691106	67	11·64005988
18	8·72067060	68	13·20428300	18	8·02117073	68	11·66411963
19	8·94769592	69	13·23415415	19	8·21283630	69	11·68742262
20	9·16194509	70	13·26310663	20	8·39298446	70	11·70999722
21	9·36440705	71	13·29117378	21	8·56257287	71	11·73187049
22	9·55597165	72	13·31838740	22	8·72245621	72	11·75306824
23	9·73744175	73	13·34477792	23	8·87339963	73	11·77361513
24	9·900954367	74	13·37037444	24	9·01609027	74	11·79353469
25	10·07293602	75	13·39520480	25	9·15114686	75	11·81284943
26	10·22821745	76	13·41929566	26	9·27912805	76	11·83158084
27	10·37593334	77	13·44267254	27	9·40053961	77	11·84974951
28	10·51658158	78	13·46535993	28	9·51584045	78	11·86737515
29	10·65061765	79	13·48738124	29	9·62544798	79	11·88447657
30	10·77845904	80	13·50875896	30	9·72974271	80	11·90107185
31	10·90048915	81	13·52951469	31	9·82907220	81	11·91717830
32	11·01706064	82	13·54966910	32	9·92375458	82	11·93281249
33	11·12849855	83	13·56924208	33	10·01408162	83	11·94799035
34	11·23510287	84	13·58825270	34	10·10032137	84	11·96272711
35	11·33715095	85	13·60671934	35	10·18272055	85	11·97703747
36	11·43489961	86	13·62465958	36	10·26150663	86	11·99093545
37	11·52858698	87	13·64209042	37	10·33688966	87	12·00443460
38	11·61843418	88	13·65902812	38	10·40906394	88	12·01754788
39	11·70464682	89	13·67548840	39	10·47820941	89	12·03028779
40	11·78741634	90	13·69148633	40	10·54449304	90	12·04266633
41	11·86692119	91	13·70703646	41	10·60806990	91	12·05469502
42	11·94332795	92	13·72215276	42	10·66908423	92	12·06638498
43	12·01679228	93	13·73684876	43	10·72767041	93	12·07774693
44	12·08745980	94	13·75113742	44	10·78395373	94	12·08879114
45	12·15546689	95	13·76503129	45	10·83805117	95	12·09952754
46	12·22094142	96	13·77854242	46	10·89007209	96	12·10996566
47	12·28400338	97	13·79168249	47	10·94011882	97	12·12011474
48	12·34476553	98	13·80446269	48	10·98828724	98	12·12998363
49	12·40333390	99	13·81689391	49	11·03466728	99	12·13958090
50	12·45980826	100	13·82898660	50	11·07934332	100	12·14891480

TABLE VI.

Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at  $2\frac{1}{2}$  per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	9 per cent.	Years	9 per cent.	Years	10 per cent.	Years	10 per cent.
1	0.91743119	51	10.00913879	1	0.90909091	51	9.09846119
2	1.71283569	52	10.04273551	2	1.68399168	52	9.12621397
3	2.40884238	53	10.07511052	3	2.35218202	53	9.15294155
4	3.02281124	54	10.10631994	4	2.93411838	54	9.17869196
5	3.56828262	55	10.13641658	5	3.44534304	55	9.20351043
6	4.05597290	56	10.16545022	6	3.89787610	56	9.22743946
7	4.49447434	57	10.19346782	7	4.30115982	57	9.25051913
8	4.89075650	58	10.22051367	8	4.66271450	58	9.27278719
9	5.25053203	59	10.24662965	9	4.98860379	59	9.29427928
10	5.57852784	60	10.27185534	10	5.28377119	60	9.31502904
11	5.87868893	61	10.29622821	11	5.55228724	61	9.33506828
12	6.15433369	62	10.31978370	12	5.79753409	62	9.35442706
13	6.40827350	63	10.34255544	13	6.02234515	63	9.37313387
14	6.64290610	64	10.36457529	14	6.22911204	64	9.39121567
15	6.86028889	65	10.38587353	15	6.41086744	65	9.40869805
16	7.06219734	66	10.40647883	16	6.59635008	66	9.42560522
17	7.25017160	67	10.42641852	17	6.76005594	67	9.44196023
18	7.42555433	68	10.44571853	18	6.91227928	68	9.45778493
19	7.58952134	69	10.46440355	19	7.05414546	69	9.47310013
20	7.74310672	70	10.48249710	20	7.18663769	70	9.48792557
21	7.88722361	71	10.50002156	21	7.31061876	71	9.50228010
22	8.02268134	72	10.51699826	22	7.42684892	72	9.51618161
23	8.15019983	73	10.53344755	23	7.53600071	73	9.52964717
24	8.27042159	74	10.54938886	24	7.63867128	74	9.54269306
25	8.38392185	75	10.56484070	25	7.73539259	75	9.55533480
26	8.49121714	76	10.57982079	26	7.82664013	76	9.56758721
27	8.59277262	77	10.59434604	27	7.91284025	77	9.57946443
28	8.68900829	78	10.60843265	28	7.99437627	78	9.59098000
29	8.78030436	79	10.62209606	29	8.07159385	79	9.60214680
30	8.86700585	80	10.63535108	30	8.14480547	80	9.61297720
31	8.94942660	81	10.64821190	31	8.21429435	81	9.62348304
32	9.02785264	82	10.66069210	32	8.28031776	82	9.63367560
33	9.10254530	83	10.67280467	33	8.34310994	83	9.64356574
34	9.17374377	84	10.68456211	34	8.40288466	84	9.65316382
35	9.24166739	85	10.69597637	35	8.45983736	85	9.66247981
36	9.30651770	86	10.70705892	36	8.51414709	86	9.67152323
37	9.36848020	87	10.71782081	37	8.56597823	87	9.68030325
38	9.42772592	88	10.72827258	38	8.61548190	88	9.68882864
39	9.48441278	89	10.73842443	39	8.66279732	89	9.69710783
40	9.53868687	90	10.74828609	40	8.70805296	90	9.70514892
41	9.59068349	91	10.75786696	41	8.75136753	91	9.71295968
42	9.64052816	92	10.76717607	42	8.79285089	92	9.72054759
43	9.68833750	93	10.77622210	43	8.83260492	93	9.72791985
44	9.73421995	94	10.78501340	44	8.87072415	94	9.73508335
45	9.77827655	95	10.79355801	45	8.90729647	95	9.74204476
46	9.82060150	96	10.80186368	46	8.94240367	96	9.74881046
47	9.86128277	97	10.80993787	47	8.97612199	97	9.75538664
48	9.90040256	98	10.81778775	48	9.00852257	98	9.76177919
49	9.93830378	99	10.82542025	49	9.03967185	99	9.76799386
50	9.97426073	100	10.83284205	50	9.06963199	100	9.77403615

Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at  $2\frac{1}{2}$  per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	11 per cent.	Years	11 per cent.	Years	12 per cent.	Years	12 per cent.
1	0.900900090	51	8.33967875	1	0.89285714	51	7.69771412
2	1.65610305	52	8.36298969	2	1.62912309	52	7.71757006
3	2.29812591	53	8.38542820	3	2.24649855	53	7.73667489
4	2.85048187	54	8.44703602	4	2.77148130	54	7.75506492
5	3.33059270	55	8.42785217	5	3.22323971	55	7.77277425
6	3.75164175	56	8.44791337	6	3.61598302	56	7.78983487
7	4.12378906	57	8.46725416	7	3.96046772	57	7.80627686
8	4.45499098	58	8.48590709	8	4.26498623	58	7.82212853
9	4.75156694	59	8.50390280	9	4.53603424	59	7.83741652
10	5.01859986	60	8.52127024	10	4.77877239	60	7.85216596
11	5.26022447	61	8.53803672	11	4.99735251	61	7.86640055
12	5.47983858	62	8.55422804	12	5.19515261	62	7.88014266
13	5.68026027	63	8.56986861	13	5.37494917	63	7.89341345
14	5.86384647	64	8.58498154	14	5.53904536	64	7.90623291
15	6.03258357	65	8.59958871	15	5.68936771	65	7.91861996
16	6.18815754	66	8.61371084	16	5.82754017	66	7.93059253
17	6.33200862	67	8.62736761	17	5.95494123	67	7.94216761
18	6.46537454	68	8.64057768	18	6.07274860	68	7.95336132
19	6.58932490	69	8.65335879	19	6.18197451	69	7.96418894
20	6.70478881	70	8.66572777	20	6.28349382	70	7.97466501
21	6.81257721	71	8.67770067	21	6.37806650	71	7.98480334
22	6.91340107	72	8.68929273	22	6.46635594	72	7.99461705
23	7.00788635	73	8.70051846	23	6.54894381	73	8.00411864
24	7.09658637	74	8.71139169	24	6.62634227	74	8.01332000
25	7.17999202	75	8.72192561	25	6.69900406	75	8.02223246
26	7.25854031	76	8.73213279	26	6.76733087	76	8.03086684
27	7.33262161	77	8.74202524	27	6.83168034	77	8.03923342
28	7.40258571	78	8.75161441	28	6.89237197	78	8.04734206
29	7.46874693	79	8.76091124	29	6.94969202	79	8.05520213
30	7.53138853	80	8.76992620	30	7.00389777	80	8.06282260
31	7.59076645	81	8.77866929	31	7.05522110	81	8.07021206
32	7.64711254	82	8.78715007	32	7.10387149	82	8.07737868
33	7.70063731	83	8.79537771	33	7.15003875	83	8.08433032
34	7.75153234	84	8.80336097	34	7.19389522	84	8.09107447
35	7.79997238	85	8.81110826	35	7.23559775	85	8.09761834
36	7.84611714	86	8.81862761	36	7.27528941	86	8.10396878
37	7.89011288	87	8.82592677	37	7.31310096	87	8.11013243
38	7.93209380	88	8.83301313	38	7.34915215	88	8.11611558
39	7.97218325	89	8.83989380	39	7.38355288	89	8.12192431
40	8.01049483	90	8.84657558	40	7.41640416	90	8.12756445
41	8.04713332	91	8.85306504	41	7.44779900	91	8.13304158
42	8.08219549	92	8.85936847	42	7.47782320	92	8.13836107
43	8.11577094	93	8.86549190	43	7.50655605	93	8.14352808
44	8.14794264	94	8.87144116	44	7.53407087	94	8.14854756
45	8.17878761	95	8.87722184	45	7.56943564	95	8.15342428
46	8.20837743	96	8.88283930	46	7.58571344	96	8.15816280
47	8.23677869	97	8.88829873	47	7.60996289	97	8.16276756
48	8.26405345	98	8.89360510	48	7.63323853	98	8.16724278
49	8.29025959	99	8.89876322	49	7.65559121	99	8.17159255
50	8.31545117	100	8.90377770	50	7.67706830	100	8.17582079

TABLE VI.

Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at 2½ per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	13 per cent.	Years	13 per cent.	Years	14 per cent.	Years	14 per cent.
1	0.89285714	51	7.14751858	1	0.87719298	51	6.67072712
2	1.60300811	52	7.16463438	2	1.57771718	52	6.68513321
3	2.19713983	53	7.18109678	3	2.14990345	53	6.69996575
4	2.69674161	54	7.19693773	4	2.62592714	54	6.71375310
5	3.12259111	55	7.21218722	5	3.02803787	55	6.72702181
6	3.48979271	56	7.22687337	6	3.37211296	56	6.73979679
7	3.80959014	57	7.24102259	7	3.66978632	57	6.75210140
8	4.09052586	58	7.25465973	8	3.92977731	58	6.76395761
9	4.33920635	59	7.26780812	9	4.15874963	59	6.77538607
10	4.56082113	60	7.28048982	10	4.36188343	60	6.78640620
11	4.75950335	61	7.29272555	11	4.54326643	61	6.79703634
12	4.93858555	62	7.30453489	12	4.70616744	62	6.80729375
13	5.10078459	63	7.31593635	13	4.85323170	63	6.81719472
14	5.24833756	64	7.32694738	14	4.98662276	64	6.82675466
15	5.38310318	65	7.33758453	15	5.10812741	65	6.83598812
16	5.50663860	66	7.34786342	16	5.21923423	66	6.84490887
17	5.62035816	67	7.35779889	17	5.32119335	67	6.85352994
18	5.72507894	68	7.36740498	18	5.41506235	68	6.86186369
19	5.82205647	69	7.37669501	19	5.50174194	69	6.86992183
20	5.91201286	70	7.38568164	20	5.58200406	70	6.87771547
21	5.99565936	71	7.39437689	21	5.65651405	71	6.88525517
22	6.07361442	72	7.40279217	22	5.72584846	72	6.89255095
23	6.14641833	73	7.41093834	23	5.79050940	73	6.89961233
24	6.21454523	74	7.41882575	24	5.85093616	74	6.90644838
25	6.27841292	75	7.42646424	25	5.90751475	75	6.91306773
26	6.33839098	76	7.43386318	26	5.96058575	76	6.91947861
27	6.39480753	77	7.44103153	27	6.01045078	77	6.92568884
28	6.44795493	78	7.44797781	28	6.05737793	78	6.93170589
29	6.49809447	79	7.45471016	29	6.10160633	79	6.93753689
30	6.54546042	80	7.46123635	30	6.14334988	80	6.94318864
31	6.59026344	81	7.46756382	31	6.18280059	81	6.94866763
32	6.63269347	82	7.47369966	32	6.22013123	82	6.95398008
33	6.67292223	83	7.47965065	33	6.25549773	83	6.95913190
34	6.71110534	84	7.48542330	34	6.28904116	84	6.96412878
35	6.74738418	85	7.49102382	35	6.32088948	85	6.96897616
36	6.78188747	86	7.49645816	36	6.35115901	86	6.97367921
37	6.81473268	87	7.50173202	37	6.37995575	87	6.97824294
38	6.84692720	88	7.50685088	38	6.40737646	88	6.98267210
39	6.87586943	89	7.51181998	39	6.43350970	89	6.98697128
40	6.90434968	90	7.51664434	40	6.45843663	90	6.99114485
41	6.93155101	91	7.52132878	41	6.48223181	91	6.99519701
42	6.95754992	92	7.52587795	42	6.50496382	92	6.99913183
43	6.98241700	93	7.53029629	43	6.51669588	93	7.00295316
44	7.00621748	94	7.53458807	44	6.52748634	94	7.00666474
45	7.02901173	95	7.53875740	45	6.53738917	95	7.01027014
46	7.05085573	96	7.54280823	46	6.54645434	96	7.01377280
47	7.07180142	97	7.54674436	47	6.55472816	97	7.01717603
48	7.09189711	98	7.55056844	48	6.562225369	98	7.02048300
49	7.11118774	99	7.55428699	49	6.56907094	99	7.02369678
50	7.12971520	100	7.55790040	50	6.57521717	100	7.02682032

Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at 24 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	15 per cent.	Years	15 per cent.	Years	16 per cent.	Years	16 per cent.
1	0.86956521	51	6.25356862	1	0.86206896	51	5.88551396
2	1.55321189	52	6.26666685	2	1.52945619	52	5.89711434
3	2.10465539	53	6.27925764	3	2.06127270	53	5.90826261
4	2.55873658	54	6.29136630	4	2.49489869	54	5.91898149
5	2.93904255	55	6.30301652	5	2.85512909	55	5.92929225
6	3.26211089	56	6.31423048	6	3.15905889	56	5.93921477
7	3.53988028	57	6.32502003	7	3.41885684	57	5.94876774
8	3.78118515	58	6.33543170	8	3.64342067	58	5.95796866
9	3.99270310	59	6.34545687	9	3.83940698	59	5.96683399
10	4.17957523	60	6.35512182	10	4.01189506	60	5.97537919
11	4.34582406	61	6.36444285	11	4.16482797	61	5.98361885
12	4.49464206	62	6.37343529	12	4.30131342	62	5.99156666
13	4.62859525	63	6.38211361	13	4.42383388	63	5.99923558
14	4.74976967	64	6.39049148	14	4.53439629	64	6.00663781
15	4.85987862	65	6.39858183	15	4.63464070	65	6.01378488
16	4.96034235	66	6.40639684	16	4.72592051	66	6.02068770
17	5.05234814	67	6.41394809	17	4.80936241	67	6.02735657
18	5.13689622	68	6.42124651	18	4.88591199	68	6.03380126
19	5.21483517	69	6.42830248	19	4.95636871	69	6.04003101
20	5.28688967	70	6.43512583	20	5.02141310	70	6.04605461
21	5.35368226	71	6.44172591	21	5.08162804	71	6.05188036
22	5.41575078	72	6.44811157	22	5.13751573	72	6.05751617
23	5.47356226	73	6.45429125	23	5.18951114	73	6.06296954
24	5.52752424	74	6.46027296	24	5.23799291	74	6.06824760
25	5.57799394	75	6.46606433	25	5.28329222	75	6.07335715
26	5.62528577	76	6.47167261	26	5.32569993	76	6.07830463
27	5.66967759	77	6.47710472	27	5.36547260	77	6.083309621
28	5.71141589	78	6.48236726	28	5.40283738	78	6.08773774
29	5.75072003	79	6.48746651	29	5.43799610	79	6.09223482
30	5.78778594	80	6.49240847	30	5.47112872	80	6.09659277
31	5.82278915	81	6.49719888	31	5.50239622	81	6.10081668
32	5.85588735	82	6.50184319	32	5.53194300	82	6.10491143
33	5.88722265	83	6.50634665	33	5.55989902	83	6.10888164
34	5.91692341	84	6.51071426	34	5.58638650	84	6.11273176
35	5.94510591	85	6.51495079	35	5.61149650	85	6.11646604
36	5.97187569	86	6.51906082	36	5.63534018	86	6.12008853
37	5.99732882	87	6.52304875	37	5.65799996	87	6.12360313
38	6.02155290	88	6.52691877	38	5.67955546	88	6.12701357
39	6.04462797	89	6.53067490	39	5.70007938	89	6.13032341
40	6.06662735	90	6.53432100	40	5.71963821	90	6.13353606
41	6.08761828	91	6.53786078	41	5.73829291	91	6.13665483
42	6.10766258	92	6.54129778	42	5.75609944	92	6.13968284
43	6.12681716	93	6.54463541	43	5.77310930	93	6.14262312
44	6.14513450	94	6.54787696	44	5.78936993	94	6.14547860
45	6.16266310	95	6.55102555	45	5.80492513	95	6.14825199
46	6.17944783	96	6.55408422	46	5.81981537	96	6.15094604
47	6.19553023	97	6.55705587	47	5.83407816	97	6.15356329
48	6.21094890	98	6.55994329	48	5.84774824	98	6.15610622
49	6.22573967	99	6.56274918	49	5.86085791	99	6.15857720
50	6.23993588	100	6.56547611	50	5.87343717	100	6.16097853

Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at  $2\frac{1}{2}$  per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	17 per cent.	Years	17 per cent.	Years	18 per cent.	Years	18 per cent.
1	0.85470085	51	5.55837503	1	0.84745762	51	5.26568832
2	1.50641622	52	5.56872052	2	1.48406010	52	5.27497207
3	2.01964237	53	5.57866069	3	1.97966031	53	5.28380037
4	2.43416865	54	5.58821602	4	2.37632490	54	5.29246182
5	2.77587430	55	5.59740570	5	2.70090069	55	5.30070381
6	3.06231845	56	5.60624768	6	2.97132695	56	5.30863259
7	3.30583507	57	5.61475878	7	3.20004680	57	5.31626342
8	3.51534197	58	5.62295478	8	3.39596229	58	5.32371056
9	3.69744694	59	5.63085049	9	3.56561039	59	5.33068745
10	3.85715024	60	5.63845984	10	3.71389955	60	5.33750667
11	3.99830543	61	5.64579694	11	3.84458709	61	5.34408008
12	4.12393026	62	5.65287112	12	3.96059796	62	5.35041884
13	4.23642163	63	5.65969702	13	4.06424315	63	5.35653346
14	4.33770744	64	5.66628461	14	4.15737277	64	5.36243385
15	4.42935597	65	5.67264426	15	4.24148548	65	5.36812938
16	4.51265598	66	5.67878574	16	4.31780815	66	5.37362887
17	4.58867633	67	5.68471832	17	4.38735482	67	5.37894070
18	4.65831101	68	5.69045077	18	4.45097094	68	5.38407276
19	4.72231345	69	5.69599137	19	4.50936700	69	5.38903254
20	4.78132311	70	5.70134799	20	4.56314443	70	5.39382714
21	4.83588629	71	5.70652811	21	4.61281576	71	5.39846328
22	4.88647244	72	5.71153878	22	4.65882046	72	5.40294735
23	4.93348726	73	5.71638675	23	4.79153751	73	5.40728540
24	4.97728317	74	5.72107840	24	4.74129547	74	5.41148320
25	5.01816775	75	5.72561981	25	4.77838060	75	5.41554622
26	5.05641067	76	5.73001676	26	4.81304343	76	5.41947967
27	5.09224935	77	5.73427476	27	4.84550420	77	5.42328849
28	5.12589368	78	5.73839906	28	4.87595729	78	5.42697744
29	5.15752983	79	5.74239465	29	4.90457491	79	5.43055098
30	5.18732357	80	5.74626631	30	4.93151018	80	5.43401343
31	5.21542298	81	5.75001859	31	4.95689970	81	5.43736887
32	5.24196072	82	5.75365583	32	4.98086570	82	5.44062121
33	5.26705602	83	5.75718219	33	5.00351793	83	5.44377419
34	5.29081631	84	5.76060163	34	5.02495517	84	5.44683138
35	5.31333868	85	5.76391795	35	5.04526658	85	5.44979617
36	5.33471006	86	5.76713478	36	5.06453287	86	5.45267184
37	5.35501331	87	5.77025558	37	5.08282723	87	5.45546161
38	5.37431809	88	5.77328369	38	5.10021624	88	5.45816816
39	5.39269167	89	5.77622230	39	5.11676055	89	5.46079466
40	5.41019465	90	5.77907445	40	5.13251557	90	5.46334375
41	5.42688250	91	5.78184307	41	5.14753199	91	5.46581805
42	5.44280611	92	5.78453098	42	5.16185628	92	5.46822010
43	5.45801229	93	5.78714087	43	5.17553116	93	5.47055230
44	5.47254411	94	5.78967532	44	5.18859591	94	5.47281699
45	5.48644132	95	5.79213683	45	5.20108674	95	5.47501639
46	5.49974062	96	5.79452776	46	5.21303710	96	5.47715263
47	5.51247600	97	5.79685043	47	5.22447791	97	5.47922779
48	5.52467893	98	5.79910703	48	5.23453780	98	5.48124383
49	5.53637863	99	5.80129968	49	5.24594334	99	5.48320266
50	5.54760224	100	5.80343043	50	5.25601920	100	5.48510611

Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at 2½ per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	19 per cent.	Years	19 per cent.	Years	20 per cent.	Years	20 per cent.
1	0·84033613	51	5·00228366	1	0·83333333	51	4·76397606
2	1·46235783	52	5·01066110	2	1·44128114	52	4·77157371
3	1·94123054	53	5·01870737	3	1·90426438	53	4·77886988
4	2·32116644	54	5·02643943	4	2·26851054	54	4·78588007
5	2·62987050	55	5·03387310	5	2·56248058	55	4·79261876
6	2·88558674	56	5·04102319	6	2·80465596	56	4·79909947
7	3·10081914	57	5·04790356	7	3·00756014	57	4·80533489
8	3·28442447	58	5·05452722	8	3·17998041	58	4·81133689
9	3·44285171	59	5·06090635	9	3·32826450	59	4·81711659
10	3·58090822	60	5·06705241	10	3·45711220	60	4·82268446
11	3·70225083	61	5·07297617	11	3·57007761	61	4·82805033
12	3·80971064	62	5·07868777	12	3·66989814	62	4·83322344
13	3·90551358	63	5·08419676	13	3·75871640	63	4·83821251
14	3·99143399	64	5·08951213	14	3·83823343	64	4·84302575
15	4·06890353	65	5·09464238	15	3·90981685	65	4·84767089
16	4·13909017	66	5·09959553	16	3·97457878	66	4·85215524
17	4·20295622	67	5·10437917	17	4·03343280	67	4·85648572
18	4·26130164	68	5·10900046	18	4·08713643	68	4·86066886
19	4·31479697	69	5·11346618	19	4·13632303	69	4·86471084
20	4·36400842	70	5·11778278	20	4·18152627	70	4·86861751
21	4·40941746	71	5·12195635	21	4·22319899	71	4·87239443
22	4·45143605	72	5·12599267	22	4·26172795	72	4·87604686
23	4·49041879	73	5·12989722	23	4·29744549	73	4·87957979
24	4·52667255	74	5·13367523	24	4·33063872	74	4·88299797
25	4·56046426	75	5·13733165	25	4·36155701	75	4·88630591
26	4·59202716	76	5·14087120	26	4·39041798	76	4·88950789
27	4·62156602	77	5·14429835	27	4·41741239	77	4·89260800
28	4·64926129	78	5·14761740	28	4·44270818	78	4·89561012
29	4·67527266	79	5·15083240	29	4·46645377	79	4·89851795
30	4·69974193	80	5·15394724	30	4·48878082	80	4·90133507
31	4·72279546	81	5·15696563	31	4·50980653	81	4·90406470
32	4·74454623	82	5·15989109	32	4·52963557	82	4·90671018
33	4·76509552	83	5·16272699	33	4·54836174	83	4·90927455
34	4·78453445	84	5·16547658	34	4·56606930	84	4·91176073
35	4·80294519	85	5·16814292	35	4·58283418	85	4·91417151
36	4·82040202	86	5·17072896	36	4·59872499	86	4·91650957
37	4·83697229	87	5·17323753	37	4·61380387	87	4·91877748
38	4·85271717	88	5·17567132	38	4·62812725	88	4·92097769
39	4·86769239	89	5·17803291	39	4·64174645	89	4·92311253
40	4·88194879	90	5·18032480	40	4·65470831	90	4·92518425
41	4·89553287	91	5·18254934	41	4·66705562	91	4·92719502
42	4·90848723	92	5·18470881	42	4·67882757	92	4·92914689
43	4·92085099	93	5·18680540	43	4·69006012	93	4·93104186
44	4·93266011	94	5·18884121	44	4·70078630	94	4·93288180
45	4·94394773	95	5·19081824	45	4·71103655	95	4·93466856
46	4·95474444	96	5·19273842	46	4·72083893	96	4·93640388
47	4·96507848	97	5·19460363	47	4·73021938	97	4·93808945
48	4·97497602	98	5·19641562	48	4·73920187	98	4·93972688
49	4·98446133	99	5·19817613	49	4·74780864	99	4·94131773
50	4·99355689	100	5·19988681	50	4·75606031	100	4·94286350

TABLE VI.

Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at  $2\frac{1}{2}$  per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	21 per cent.	Years	21 per cent.	Years	22 per cent.	Years	22 per cent.
1	0·82644628	51	4·54734179	1	0·81967213	51	4·34955276
2	1·42080377	52	4·55426366	2	1·40089934	52	4·35588517
3	1·86867977	53	4·56090993	3	1·83440070	53	4·36196465
4	2·21819065	54	4·56729482	4	2·17005470	54	4·36780432
5	2·49845807	55	4·57343162	5	2·43755674	55	4·37341641
6	2·72814099	56	4·57933274	6	2·65569002	56	4·37881235
7	2·91974699	57	4·58500982	7	2·83691621	57	4·38400286
8	3·08197424	58	4·59047373	8	2·98982849	58	4·38899793
9	3·22105913	59	4·59573469	9	3·12054455	59	4·39380698
10	3·34158970	60	4·60080228	10	3·23533812	60	4·39843881
11	3·44701644	61	4·60568552	11	3·33215646	61	4·40290171
12	3·53998432	62	4·61039286	12	3·41895389	62	4·40720346
13	3·62255484	63	4·61493228	13	3·49591346	63	4·41135140
14	3·69635856	64	4·61931131	14	3·56459823	64	4·41535243
15	3·76270210	65	4·62353703	15	3·62625685	65	4·41921308
16	3·82264475	66	4·62761612	16	3·68189884	66	4·42293946
17	3·87705442	67	4·63155492	17	3·73234921	67	4·42653741
18	3·92664893	68	4·63535939	18	3·77828880	68	4·43001240
19	3·97202716	69	4·63903519	19	3·82028442	69	4·43336962
20	4·01369265	70	4·64258768	20	3·85881181	70	4·43661398
21	4·05207193	71	4·64602192	21	3·89427318	71	4·43975015
22	4·08752860	72	4·64934273	22	3·92701091	72	4·44278254
23	4·12037463	73	4·65255467	23	3·95731829	73	4·44571534
24	4·15087914	74	4·65566209	24	3·98544801	74	4·44855251
25	4·17927553	75	4·65866909	25	4·01161892	75	4·45129785
26	4·20576722	76	4·66157959	26	4·03602155	76	4·45395494
27	4·23053233	77	4·66439732	27	4·05882253	77	4·45652719
28	4·25372748	78	4·66712584	28	4·08016825	78	4·45901786
29	4·27549094	79	4·66976850	29	4·10018779	79	4·46143005
30	4·29594525	80	4·67232855	30	4·11899546	80	4·46376670
31	4·31519938	81	4·67480904	31	4·13669284	81	4·46603063
32	4·33335058	82	4·67721290	32	4·15337048	82	4·46822453
33	4·35048590	83	4·67954294	33	4·16910939	83	4·47035095
34	4·36668350	84	4·68180182	34	4·18398224	84	4·47241234
35	4·38201375	85	4·68399210	35	4·19805443	85	4·47441104
36	4·39654020	86	4·68611622	36	4·21138496	86	4·47634929
37	4·41032034	87	4·68817651	37	4·22402721	87	4·47822922
38	4·42340637	88	4·69017521	38	4·23602957	88	4·48005288
39	4·43584574	89	4·69211445	39	4·24743603	89	4·48182222
40	4·44768170	90	4·69399629	40	4·25828667	90	4·48353913
41	4·45895377	91	4·69582268	41	4·26861806	91	4·48520539
42	4·46969811	92	4·69759551	42	4·27846369	92	4·48682273
43	4·47994787	93	4·69931659	43	4·28785423	93	4·48839280
44	4·48973352	94	4·70098764	44	4·29681785	94	4·48991719
45	4·49908310	95	4·70261033	45	4·30538045	95	4·49139741
46	4·50892245	96	4·70418625	46	4·31356593	96	4·49283493
47	4·51657545	97	4·70571694	47	4·32139632	97	4·49423114
48	4·52476416	98	4·70720387	48	4·32889201	98	4·49558740
49	4·53260904	99	4·70864845	49	4·33607185	99	4·49690500
50	4·54012904	100	4·71005205	50	4·34295335	100	4·49818519



Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at 2½ per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	23 per cent.	Years	23 per cent.	Years	24 per cent.	Years	24 per cent.
1	0·81300813	51	4·16825242	1	0·80645161	51	4·00146141
2	1·38154528	52	4·17406758	2	1·36271871	52	4·00682019
3	1·80135660	53	4·17964980	3	1·76948192	53	4·01196377
4	2·12396353	54	4·18501122	4	2·07978956	54	4·01690336
5	2·37955377	55	4·19016313	5	2·32424706	55	4·02164945
6	2·58698765	56	4·19511609	6	2·52175028	56	4·02621183
7	2·75865547	57	4·19988000	7	2·68459670	57	4·03059965
8	2·90303279	58	4·20446409	8	2·82113434	58	4·03482147
9	3·02611333	59	4·20887705	9	2·93722944	59	4·03888533
10	3·13225545	60	4·21312700	10	3·03712494	60	4·04279875
11	3·22470427	61	4·21722159	11	3·12396562	61	4·04656881
12	3·30592581	62	4·22116800	12	3·20013182	62	4·05020216
13	3·37782753	63	4·22497300	13	3·26745842	63	4·05370505
14	3·44190804	64	4·22864295	14	3·32738259	64	4·05708338
15	3·49936103	65	4·23218385	15	3·38104602	65	4·06034269
16	3·55114912	66	4·23560138	16	3·42936718	66	4·06348822
17	3·59805715	67	4·23890088	17	3·47309327	67	4·06652492
18	3·64073145	68	4·24208740	18	3·51283843	68	4·06945746
19	3·67970907	69	4·24516573	19	3·54911207	69	4·07229026
20	3·71543997	70	4·24814039	20	3·58234027	70	4·07502750
21	3·74830398	71	4·25101568	21	3·61288217	71	4·07767315
22	3·77862394	72	4·25379565	22	3·64104263	72	4·08023097
23	3·80667601	73	4·25648417	23	3·66708207	73	4·08270450
24	3·83269783	74	4·25908489	24	3·69122435	74	4·08509713
25	3·85689499	75	4·26160128	25	3·71366291	75	4·08741208
26	3·87944626	76	4·26403667	26	3·73456579	76	4·08965239
27	3·90050784	77	4·26639417	27	3·75407967	77	4·09182096
28	3·92021680	78	4·26867680	28	3·77233317	78	4·09392056
29	3·93869394	79	4·27088739	29	3·78943951	79	4·09595382
30	3·95604610	80	4·27302867	30	3·80549881	80	4·09792323
31	3·97236817	81	4·27510321	31	3·82059988	81	4·09983120
32	3·98774467	82	4·27711349	32	3·83482177	82	4·10167999
33	4·00225116	83	4·27906187	33	3·84823512	83	4·10347177
34	4·01595538	84	4·28095058	34	3·86090323	84	4·10520863
35	4·02891825	85	4·28278178	35	3·87288296	85	4·10689254
36	4·04119470	86	4·28455753	36	3·88422558	86	4·10852540
37	4·05283438	87	4·28629799	37	3·89497740	87	4·11010902
38	4·06388231	88	4·28795043	38	3·90518038	88	4·11164513
39	4·07437937	89	4·28957127	39	3·91487261	89	4·11313539
40	4·08436279	90	4·29114401	40	3·92408877	90	4·11458139
41	4·09388654	91	4·29267031	41	3·93286048	91	4·11598466
42	4·10292168	92	4·29415174	42	3·94121605	92	4·11734664
43	4·11155668	93	4·29558985	43	3·94918375	93	4·11866874
44	4·11979765	94	4·29698607	44	3·95678607	94	4·11995229
45	4·12766862	95	4·29834180	45	3·96404594	95	4·12119860
46	4·13519171	96	4·29965837	46	3·97098391	96	4·12240887
47	4·14238735	97	4·30093709	47	3·97761896	97	4·12358432
48	4·14927440	98	4·30217918	48	3·98396861	98	4·12472607
49	4·15587033	99	4·30338583	49	3·99004906	99	4·12583522
50	4·16219132	100	4·30455819	50	3·99587535	100	4·12691283

Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at  $2\frac{1}{2}$  per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	25 per cent.	Years	25 per cent.	Years	25 per cent.	Years	25 per cent.
1	0.80000000	26	3.60011705	51	3.84750498	76	3.92897113
2	1.34459834	27	3.61824777	52	3.85245908	77	3.93097260
3	1.73871566	28	3.63520126	53	3.85721375	78	3.93291034
4	2.03741560	29	3.65108390	54	3.86177941	79	3.93478677
5	2.27145288	30	3.66598962	55	3.86616582	80	3.93660422
6	2.45972223			56	3.87038205		
7	2.61441032	31	3.68000173	57	3.87443662	81	3.93836489
8	2.74373003	32	3.69319435	58	3.87833748	82	3.94007089
9	2.85341801	33	3.70563363	59	3.88209208	83	3.94172423
10	2.94760256	34	3.71737883	60	3.88570742	84	3.94332683
		35	3.72848317			85	3.94488053
11	3.02933038	36	3.73899460	61	3.88919006	86	3.94638708
12	3.10089897	37	3.74895640	62	3.89254617	87	3.94784815
13	3.16407363	38	3.75840778	63	3.89578156	88	3.94926535
14	3.22023311	39	3.76738431	64	3.89890168	89	3.95064021
15	3.27046993	40	3.77591838	65	3.90196170	90	3.95197420
16	3.31566099			66	3.90481646		
17	3.35651826	41	3.78403949	67	3.90762055	91	3.95326872
18	3.39362584	42	3.79177460	68	3.91032831	92	3.95452513
19	3.42746741	43	3.79914840	69	3.91294383	93	3.95574472
20	3.45844693	44	3.80618353	70	3.91547098	94	3.95692872
		45	3.81290080			95	3.95807833
21	3.48690442	46	3.81931936	71	3.91791345	96	3.95919468
22	3.51312813	47	3.82545687	72	3.92027470	97	3.96027888
23	3.53736403	48	3.83132964	73	3.92255804	98	3.96133198
24	3.55982329	49	3.83695277	74	3.92476660	99	3.96235499
25	3.58068822	50	3.84234022	75	3.92690336	100	3.96334887



**TABLE VII.**  
**FOR**  
**VALUING MINERAL AND OTHER PROPERTIES.**



TABLE VII.

Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at 8 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	3½ per cent.	Years	3½ per cent.	Years	4 per cent.	Years	4 per cent.
1	0.96618357	51	22.97064504	1	0.96153846	51	20.60418764
2	1.89533635	52	23.13894415	2	1.87754347	52	20.73949417
3	2.78916405	53	23.30203549	3	2.75080186	53	20.87041924
4	3.64927483	54	23.46008908	4	3.58388198	54	20.99711781
5	4.47718618	55	23.61326887	5	4.37915472	55	21.11973855
6	5.27433115	56	23.76173297	6	5.13881215	56	21.23842415
7	6.04206411	57	23.90563402	7	5.86488408	57	21.35331174
8	6.77766575	58	24.04511909	8	6.55925283	58	21.46453285
9	7.49434980	59	24.18033027	9	7.22366639	59	21.57221398
10	8.18126365	60	24.31140457	10	7.85974980	60	21.67647661
11	8.84349638	61	24.43847430	11	8.46901774	61	21.77743756
12	9.48208065	62	24.56166184	12	9.05287996	62	21.87520491
13	10.09799661	63	24.68110677	13	9.61265388	63	21.96989959
14	10.69217517	64	24.79691199	14	10.14957026	64	22.06161265
15	11.26550098	65	24.90919800	15	10.66478051	65	22.15044847
16	11.82781528	66	25.01813220	16	11.15936304	66	22.23650325
17	12.35291852	67	25.12343289	17	11.63432894	67	22.31986976
18	12.86857266	68	25.22603339	18	12.09062710	68	22.40063727
19	13.36650354	69	25.32531718	19	12.52914897	69	22.47889185
20	13.84740292	70	25.42160131	20	12.95073284	70	22.55471628
21	14.31193037	71	25.51497955	21	13.35616766	71	22.62819046
22	14.76071520	72	25.60554353	22	13.74619672	72	22.69939137
23	15.19435802	73	25.69337787	23	14.12152080	73	22.76839322
24	15.61343242	74	25.77857024	24	14.48280123	74	22.83526751
25	16.01848636	75	25.86120175	25	14.83066253	75	22.90008337
26	16.41004359	76	25.94135060	26	15.16569501	76	22.96200717
27	16.78860502	77	26.01909611	27	15.48845708	77	23.02380335
28	17.15464972	78	26.09451002	28	15.79947723	78	23.08283383
29	17.50863624	79	26.16766486	29	16.09925614	79	23.14005839
30	17.85100361	80	26.23863016	30	16.38826842	80	23.19553485
31	18.18217230	81	26.30747306	31	16.66696423	81	23.24931890
32	18.50254524	82	26.37425864	32	16.93577090	82	23.30146439
33	18.81250859	83	26.43904992	33	17.19509430	83	23.35202337
34	19.11243262	84	26.50190777	34	17.44532010	84	23.40104596
35	19.40267262	85	26.56289133	35	17.68681516	85	23.44858081
36	19.68356922	86	26.62205768	36	17.91992846	86	23.49467475
37	19.95544970	87	26.67946207	37	18.14499229	87	23.53937302
38	20.21862803	88	26.73515815	38	18.36232312	88	23.58271948
39	20.47340591	89	26.78919781	39	18.57222265	89	23.62475645
40	20.72007314	90	26.84163123	40	18.77497850	90	23.66552478
41	20.95890824	91	26.89250714	41	18.97086513	91	23.70506411
42	21.19017899	92	26.94187258	42	19.16014453	92	23.74341259
43	21.41414275	93	26.98977326	43	19.34306678	93	23.78060727
44	21.63104719	94	27.03625348	44	19.51987094	94	23.81668396
45	21.84113056	95	27.08135596	45	19.69078547	95	23.85167716
46	22.04462203	96	27.12512225	46	19.85602878	96	23.88562038
47	22.24174232	97	27.16759267	47	20.01580989	97	23.91854608
48	22.43270390	98	27.20880612	48	20.17032883	98	23.95048553
49	22.61771135	99	27.24880037	49	20.31977709	99	23.98146906
50	22.79696180	100	27.28761200	50	20.46433812	100	24.01152597

Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at 3 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	4½ per cent.	Years	4½ per cent.	Years	5 per cent.	Years	5 per cent.
1	0.95693780	51	18.67977925	1	0.95238095	51	17.08413948
2	1.86608155	52	18.79092298	2	1.84294144	52	17.17705901
3	2.71348062	53	18.89833805	3	2.67715853	53	17.26677162
4	3.52079148	54	19.00216439	4	3.45988383	54	17.35340328
5	4.28532423	55	19.10253575	5	4.19543034	55	17.43707409
6	5.01008279	56	19.19958003	6	4.88764524	56	17.51789855
7	5.69779941	57	19.29341971	7	5.53997119	57	17.59598600
8	6.35096491	58	19.38417188	8	6.15549815	58	17.67144066
9	6.97185463	59	19.47194875	9	6.73700745	59	17.74436219
10	7.56255138	60	19.55685776	10	7.28700946	60	17.81484574
11	8.12496536	61	19.63900188	11	7.80777582	61	17.88298227
12	8.66085170	62	19.71847636	12	8.30136716	62	17.94885590
13	9.17182594	63	19.79538634	13	8.76965710	63	18.01255856
14	9.65937760	64	19.86981216	14	9.21435302	64	18.07416122
15	10.12488227	65	19.94184448	15	9.63701411	65	18.13374306
16	10.56961234	66	20.01160293	16	10.03906710	66	18.19137709
17	10.99474645	67	20.07905977	17	10.42182010	67	18.24713336
18	11.40137805	68	20.14440026	18	10.78647467	68	18.30107896
19	11.79052288	69	20.20766255	19	11.13413643	69	18.35327828
20	12.16312587	70	20.26891783	20	11.46582453	70	18.40379299
21	12.52006709	71	20.32823464	21	11.78247989	71	18.45268235
22	12.86216731	72	20.38567886	22	12.08497261	72	18.50000324
23	13.19019289	73	20.44131386	23	12.37410850	73	18.54581022
24	13.50486020	74	20.49520057	24	12.65063492	74	18.59015572
25	13.80683963	75	20.54739776	25	12.91524598	75	18.63309018
26	14.09675925	76	20.59796175	26	13.16858723	76	18.67466190
27	14.37520811	77	20.64694710	27	13.41125985	77	18.71491754
28	14.64273912	78	20.69440614	28	13.64382432	78	18.75390183
29	14.89987187	79	20.74038930	29	13.86680387	79	18.79165781
30	15.14709511	80	20.78494524	30	14.08068755	80	18.82823692
31	15.38486893	81	20.82812079	31	14.28593290	81	18.86364899
32	15.61362686	82	20.86996112	32	14.48296853	82	18.89796241
33	15.83377779	83	20.91050980	33	14.67219631	83	18.93120415
34	16.04570757	84	20.94980877	34	14.85399340	84	18.96340973
35	16.24978084	85	20.98789863	35	15.02871425	85	18.99461351
36	16.44634209	86	21.02481840	36	15.19666211	86	19.02484848
37	16.63571747	87	21.06060575	37	15.35824070	87	19.05414642
38	16.81821558	88	21.09529711	38	15.51365556	88	19.08253806
39	16.99412892	89	21.12892760	39	15.66321541	89	19.11005297
40	17.16373475	90	21.16153109	40	15.80718325	90	19.13671965
41	17.32729614	91	21.19314036	41	15.94580750	91	19.16256564
42	17.48506287	92	21.22378694	42	16.07932301	92	19.18761742
43	17.63727212	93	21.25350142	43	16.20795183	93	19.21190063
44	17.78414944	94	21.28231331	44	16.33190430	94	19.23544000
45	17.92590930	95	21.31025102	45	16.45137961	95	19.25825932
46	18.06275579	96	21.33734211	46	16.56656656	96	19.28038162
47	18.19488327	97	21.36361324	47	16.67764431	97	19.30182917
48	18.32247691	98	21.38909007	48	16.78478292	98	19.32262417
49	18.44571319	99	21.41379745	49	16.88814389	99	19.34278505
50	18.56476045	100	21.43775939	50	16.98788076	100	19.36233409

TABLE VII.

118

Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at 3 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	5½ per cent.	Years	5½ per cent.	Years	6 per cent.	Years	6 per cent.
1	0.94786729	51	15.73964779	1	0.94339622	51	14.59133539
2	1.82611433	52	15.81848386	2	1.80959173	52	14.65906309
3	2.64179600	53	15.89453508	3	2.60735549	53	14.72435148
4	3.40104768	54	15.96791494	4	3.34417912	54	14.78730296
5	4.10923039	55	16.03873135	5	4.02650128	55	14.84801476
6	4.77104927	56	16.10708698	6	4.65988652	56	14.90657914
7	5.39065094	57	16.17307959	7	5.24916876	57	14.96308386
8	5.97170408	58	16.23680223	8	5.79856743	58	15.01761223
9	6.51746635	59	16.29834363	9	6.31178221	59	15.07024359
10	7.03084046	60	16.35778836	10	6.79207063	60	15.12105340
11	7.51442124	61	16.41521709	11	7.24231231	61	15.17011355
12	7.97053545	62	16.47070440	12	7.66506220	62	15.21749047
13	8.40127557	63	16.52433115	13	8.06259515	63	15.26325599
14	8.80852857	64	16.57616025	14	8.43694329	64	15.30746527
15	9.19400054	65	16.62626130	15	8.78992755	65	15.35018073
16	9.55923794	66	16.67472348	16	9.12318449	66	15.39145878
17	9.90564581	67	16.72153314	17	9.43818902	67	15.43135368
18	10.23450360	68	16.76682410	18	9.73627395	68	15.46991720
19	10.54697892	69	16.81062764	19	10.01864665	69	15.50719891
20	10.84413953	70	16.85299759	20	10.28640355	70	15.54324614
21	11.12696376	71	16.89398560	21	10.54054258	71	15.57810426
22	11.39634974	72	16.93364115	22	10.78197401	72	15.61181665
23	11.65312343	73	16.97201168	23	11.01152985	73	15.64442488
24	11.89804576	74	17.00914266	24	11.22997214	74	15.67506872
25	12.13181886	75	17.04507782	25	11.43800013	75	15.70648640
26	12.35509172	76	17.07985894	26	11.63625663	76	15.73601441
27	12.56846510	77	17.11352637	27	11.82533363	77	15.76458791
28	12.77249587	78	17.14611870	28	12.00577717	78	15.79224054
29	12.96770103	79	17.17767304	29	12.17809177	79	15.81900459
30	13.15456122	80	17.20822508	30	12.34274429	80	15.84491110
31	13.33352377	81	17.23780909	31	12.50016738	81	15.86998982
32	13.50500567	82	17.26645804	32	12.65076257	82	15.89426936
33	13.66939600	83	17.29420365	33	12.79490302	83	15.91777724
34	13.82705824	84	17.32107639	34	12.93293595	84	15.94053985
35	13.97833245	85	17.34710567	35	13.06518494	85	15.96258263
36	14.12353690	86	17.37231973	36	13.19195181	86	15.98393001
37	14.26297006	87	17.39674572	37	13.31351849	87	16.00460546
38	14.39691190	88	17.42040988	38	13.43014857	88	16.02463163
39	14.52562541	89	17.44333746	39	13.54208886	89	16.04403029
40	14.64935783	90	17.46555272	40	13.64957061	90	16.06282237
41	14.76834182	91	17.48707913	41	13.75281077	91	16.08102803
42	14.88276854	92	17.50793922	42	13.85201308	92	16.09866632
43	14.99292852	93	17.52815479	43	13.94736899	93	16.11575734
44	15.09893268	94	17.54774684	44	14.03905867	94	16.13231771
45	15.20099307	95	17.56673558	45	14.12725179	95	16.14836526
46	15.29928356	96	17.58514052	46	14.21210819	96	16.16391678
47	15.39396864	97	17.60298056	47	14.29377873	97	16.17898846
48	15.48520398	98	17.62027383	48	14.37240580	98	16.19359586
49	15.57313700	99	17.63703788	49	14.44812393	99	16.20775473
50	15.65790744	100	17.65328964	50	14.52106035	100	16.22147744



Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at 3 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	7 per cent.	Years	7 per cent.	Years	8 per cent.	Years	6 per cent.
1	0.93457943	51	12.73336709	1	0.92592592	51	11.29511823
2	1.77742755	52	12.78491442	2	1.74638679	52	11.33565999
3	2.54109998	53	12.83454758	3	2.47812827	53	11.37466127
4	3.23596273	54	12.88235073	4	3.13453049	54	11.41219109
5	3.87064953	55	12.92840350	5	3.72641314	55	11.44831867
6	4.45240930	56	12.97278124	6	4.26262001	56	11.48310336
7	4.98737312	57	13.01555539	7	4.75045044	57	11.51660525
8	5.48076177	58	13.05679360	8	5.19598235	58	11.54887815
9	5.93704863	59	13.09656008	9	5.60431757	59	11.57998092
20	6.36008890	60	13.13491577	10	5.97977020	60	11.60995762
11	6.75322282	61	13.17191855	11	6.32601306	61	11.63885769
12	7.11935891	62	13.20762187	12	6.64619261	62	11.66672495
13	7.46104157	63	13.24208274	13	6.94301997	63	11.69360579
14	7.78050638	64	13.27534625	14	7.21884378	64	11.71953712
15	8.07972553	65	13.30746136	15	7.47570879	65	11.74455874
16	8.36044561	66	13.33847318	16	7.71540350	66	11.76870731
17	8.62421894	67	13.36842477	17	7.93949915	67	11.79201775
18	8.87242987	68	13.39735714	18	8.14938169	68	11.81452327
19	9.10631693	69	13.42530947	19	8.34627837	69	11.83625553
20	9.32699156	70	13.45231908	20	8.53127981	70	11.85724469
21	9.53545399	71	13.47842168	21	8.70535854	71	11.87751951
22	9.73260687	72	13.50365136	22	8.86938454	72	11.89710745
23	9.91926682	73	13.52804071	23	9.02413845	73	11.91603469
24	10.09617455	74	13.55162087	24	9.17032276	74	11.93432623
25	10.26400341	75	13.57442171	25	9.30857133	75	11.95200601
26	10.42336690	76	13.59647167	26	9.43945760	76	11.96909681
27	10.57482526	77	13.61779815	27	9.56350167	77	11.98562054
28	10.71889100	78	13.63842730	28	9.68117627	78	12.00159807
29	10.85603399	79	13.65838417	29	9.79291212	79	12.01704940
30	10.98668576	80	13.67769284	30	9.89910248	80	12.03199369
31	11.11124336	81	13.69637630	31	10.00010712	81	12.04644927
32	11.23007273	82	13.71445668	32	10.09625586	82	12.06043372
33	11.34351170	83	13.73195520	33	10.18785156	83	12.07396389
34	11.45187260	84	13.74889221	34	10.27517289	84	12.08705592
35	11.55544472	85	13.76528728	35	10.35847667	85	12.09972533
36	11.65449628	86	13.78115918	36	10.43799996	86	12.11198697
37	11.74927640	87	13.79652592	37	10.51396195	87	12.12385511
38	11.84001673	88	13.81140487	38	10.58656559	88	12.13534346
39	11.92693299	89	13.82581271	39	10.65599912	89	12.14646518
40	12.01022629	90	13.83976543	40	10.72243731	90	12.15723291
41	12.09008435	91	13.85327848	41	10.78604269	91	12.16765882
42	12.16668261	92	13.86636665	42	10.84696661	92	12.17775456
43	12.24018519	93	13.87904425	43	10.90535014	93	12.18753138
44	12.31074584	94	13.89132502	44	10.96132498	94	12.19700010
45	12.37850870	95	13.90322216	45	11.01501421	95	12.20617108
46	12.44360902	96	13.91474842	46	11.06653293	96	12.21505434
47	12.50617391	97	13.92591610	47	11.11598899	97	12.22365953
48	12.56632288	98	13.93673700	48	11.16348350	98	12.23199590
49	12.62416843	99	13.94722251	49	11.20911134	99	12.24007238
50	12.67981654	100	13.95738361	50	11.25296164	100	12.24789756

TABLE VII.

Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at 3 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	9 per cent.	Years	9 per cent.	Years	10 per cent.	Years	10 per cent.
1	0.91743119	51	10.14879934	1	0.90909090	51	9.21371763
2	1.71641160	52	10.18151776	2	1.68744805	52	9.24067663
3	2.41820212	53	10.21297047	3	2.36110581	53	9.26657763
4	3.03926384	54	10.24321656	4	2.94961719	54	9.29147106
5	3.59254024	55	10.27231169	5	3.46795265	55	9.31540432
6	4.08834922	56	10.30030831	6	3.92776833	56	9.33842205
7	4.53501671	57	10.32725595	7	4.33827521	57	9.36056631
8	4.93933536	58	10.35320134	8	4.70684834	58	9.38187675
9	5.30690193	59	10.37818866	9	5.03946260	59	9.40239080
10	5.64236947	60	10.40225968	10	5.34100996	60	9.42214381
11	5.94963818	61	10.42545395	11	5.61553421	61	9.44116920
12	6.23200176	62	10.44780794	12	5.86640717	62	9.45949778
13	6.49226099	63	10.46936009	13	6.09646272	63	9.47716189
14	6.73281256	64	10.49014113	14	6.30810001	64	9.49418747
15	6.95571945	65	10.51018401	15	6.50336371	65	9.51060221
16	7.16276711	66	10.52951904	16	6.68400724	66	9.52643161
17	7.35550861	67	10.54817507	17	6.85154279	67	9.54169987
18	7.53530123	68	10.56617953	18	7.00728147	68	9.55642998
19	7.70333646	69	10.58335848	19	7.15236567	69	9.57064382
20	7.86066453	70	10.60033681	20	7.28779538	70	9.58436215
21	8.00821473	71	10.61653813	21	7.41444968	71	9.59760476
22	8.14681242	72	10.63218498	22	7.53310452	72	9.61039048
23	8.27719308	73	10.64729886	23	7.64444741	73	9.62273727
24	8.40001433	74	10.66190027	24	7.74908969	74	9.63466219
25	8.51586588	75	10.67600879	25	7.84757677	75	9.64618160
26	8.62527813	76	10.68964308	26	7.94039682	76	9.65731100
27	8.72872949	77	10.70282102	27	8.02798812	77	9.66806530
28	8.82665248	78	10.71555967	28	8.11074519	78	9.67845866
29	8.91943927	79	10.72787532	29	8.18902423	79	9.68850463
30	9.00744615	80	10.73978361	30	8.26314758	80	9.69821618
31	9.09099762	81	10.75129944	31	8.33340772	81	9.70760568
32	9.17038984	82	10.76243712	32	8.40007061	82	9.71668501
33	9.24589364	83	10.77321036	33	8.46337865	83	9.72546550
34	9.31775723	84	10.78363226	34	8.52355323	84	9.73395802
35	9.38620846	85	10.79371544	35	8.58079697	85	9.74217298
36	9.45145689	86	10.80347187	36	8.63529565	86	9.75012036
37	9.51369561	87	10.81291318	37	8.68721995	87	9.75780969
38	9.57310279	88	10.82205046	38	8.73672694	88	9.76525016
39	9.62984312	89	10.83089437	39	8.78396322	89	9.77245057
40	9.68406907	90	10.83945511	40	8.82905708	90	9.77941934
41	9.73592199	91	10.84774252	41	8.87213759	91	9.78616458
42	9.78553310	92	10.85576602	42	8.91331747	92	9.79269406
43	9.83302440	93	10.86353468	43	8.95270294	93	9.79901526
44	9.87850946	94	10.87105723	44	8.99039267	94	9.80513536
45	9.92209413	95	10.87834204	45	9.02647844	95	9.81106124
46	9.96387718	96	10.88539716	46	9.06104571	96	9.81679954
47	10.00395091	97	10.89223037	47	9.09417419	97	9.82235666
48	10.04240165	98	10.89884912	48	9.12593827	98	9.82773872
49	10.07931023	99	10.90526059	49	9.15640751	99	9.83295159
50	10.11475243	100	10.91147169	50	9.18564698	100	9.83800099

Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at 3 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	11 per cent.	Years	11 per cent.	Years	12 per cent.	Years	12 per cent.
1	0.90090090	51	8.43641058	1	0.89285714	51	7.78005334
2	1.65944576	52	8.45900713	2	1.63235767	52	7.79926661
3	2.30664351	53	8.48070639	3	2.25463707	53	7.81770941
4	2.86510749	54	8.50155183	4	2.78530549	54	7.83541958
5	3.35171670	55	8.52158429	5	3.24301986	55	7.85243263
6	3.77932519	56	8.54084216	6	3.64169375	56	7.86878192
7	4.15789431	57	8.55936159	7	3.99191472	57	7.88449883
8	4.49526312	58	8.57717661	8	4.30188219	58	7.89961286
9	4.79768505	59	8.59431931	9	4.57804488	59	7.91415183
10	5.07020956	60	8.61081997	10	4.82554435	60	7.92814194
11	5.31695858	61	8.62670718	11	5.04853032	61	7.94160792
12	5.54133018	62	8.64200729	12	5.25038880	62	7.95457255
13	5.74615078	63	8.65674788	13	5.43391011	63	7.96705961
14	5.93379056	64	8.67095111	14	5.60141437	64	7.97908827
15	6.10625194	65	8.68464059	15	5.75484651	65	7.99067885
16	6.26523826	66	8.69783802	16	5.89584926	66	8.00185006
17	6.41220764	67	8.71056399	17	6.02581957	67	8.01261963
18	6.54841556	68	8.72283807	18	6.14595301	68	8.02300439
19	6.67494892	69	8.73467882	19	6.25727876	69	8.03302030
20	6.79275341	70	8.74610388	20	6.36068759	70	8.04268251
21	6.90265574	71	8.75713003	21	6.45695441	71	8.05200544
22	7.00538179	72	8.76777324	22	6.54675650	72	8.06100279
23	7.10157151	73	8.77804870	23	6.63468843	73	8.06968759
24	7.19179133	74	8.78797089	24	6.70927432	74	8.07807225
25	7.27654436	75	8.79755360	25	6.78297796	75	8.08616859
26	7.35627907	76	8.80680998	26	6.85221129	76	8.09398785
27	7.43139049	77	8.81575258	27	6.91734142	77	8.10154079
28	7.50225630	78	8.82439339	28	6.97869659	78	8.10883766
29	7.56918207	79	8.83274383	29	7.03657119	79	8.11588222
30	7.63246568	80	8.84081484	30	7.09122998	80	8.12270181
31	7.69237108	81	8.84861685	31	7.14291180	81	8.12928736
32	7.74913758	82	8.85615985	32	7.19183258	82	8.13565338
33	7.80298268	83	8.86345340	33	7.23818812	83	8.14180804
34	7.85410446	84	8.87050663	34	7.28215629	84	8.14775912
35	7.90268372	85	8.87732830	35	7.32389914	85	8.15351409
36	7.94888585	86	8.88392680	36	7.36356452	86	8.15908010
37	7.99286241	87	8.89031015	37	7.40128767	87	8.16446398
38	8.03475255	88	8.89648605	38	7.43719253	88	8.16967229
39	8.07468427	89	8.90246188	39	7.47139288	89	8.17471132
40	8.11277550	90	8.90824473	40	7.50399337	90	8.17958709
41	8.14913511	91	8.91384139	41	7.53509041	91	8.18430539
42	8.18386372	92	8.91925838	42	7.56477300	92	8.18887175
43	8.21705446	93	8.92450195	43	7.59312338	93	8.19329149
44	8.24879372	94	8.92957813	44	7.62021768	94	8.19756974
45	8.27916170	95	8.93449269	45	7.64612652	95	8.20171139
46	8.30823293	96	8.93925118	46	7.67091541	96	8.20572115
47	8.33607684	97	8.94385894	47	7.69464530	97	8.20960357
48	8.36275813	98	8.94832109	48	7.71737290	98	8.21336300
49	8.38833718	99	8.95264258	49	7.73915109	99	8.21700362
50	8.41287040	100	8.95682815	50	7.76002920	100	8.22052945

Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at 3 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	13 per cent.	Years	13 per cent.	Years	14 per cent.	Years	14 per cent.
1	0.88495575	51	7.21845378	1	0.87719298	51	6.73247331
2	1.60613973	52	7.23499042	2	1.58075066	52	6.74685603
3	2.20492404	53	7.25085837	3	2.15735598	53	6.76065300
4	2.70982849	54	7.26609087	4	2.63833416	54	6.77389360
5	3.14115169	55	7.28071907	5	3.04548828	55	6.78660539
6	3.51373430	56	7.29477220	6	3.39446193	56	6.79881419
7	3.83867796	57	7.30827775	7	3.69677084	57	6.81054426
8	4.12445308	58	7.32126154	8	3.96108019	58	6.82181838
9	4.37763479	59	7.33374789	9	4.19403525	59	6.83265798
10	4.60340500	60	7.34575968	10	4.40081754	60	6.84308324
11	4.80590285	61	7.35731853	11	4.58552689	61	6.85311316
12	4.98847449	62	7.36244430	12	4.75144964	62	6.86276527
13	5.15385430	63	7.37915772	13	4.90125097	63	6.87205774
14	5.30429862	64	7.38947550	14	5.03711500	64	6.88100530
15	5.44168585	65	7.39941534	15	5.16084867	65	6.88962348
16	5.56759240	66	7.40899351	16	5.27395982	66	6.89792658
17	5.68335109	67	7.41822544	17	5.37771658	67	6.90592813
18	5.79009641	68	7.42712576	18	5.47319324	68	6.91364095
19	5.88880012	69	7.43570834	19	5.56130593	69	6.92107722
20	5.98029942	70	7.44398632	20	5.64284066	70	6.92824846
21	6.06531949	71	7.45197223	21	5.71847567	71	6.93516562
22	6.14449160	72	7.45967795	22	5.78879931	72	6.94183910
23	6.21836784	73	7.46711476	23	5.85432441	73	6.94827881
24	6.28743318	74	7.47429343	24	5.91550007	74	6.95449413
25	6.35211538	75	7.48122419	25	5.97272123	75	6.96049402
26	6.41279315	76	7.48791677	26	6.02633665	76	6.96628700
27	6.46980306	77	7.49438050	27	6.07665542	77	6.97188119
28	6.52344515	78	7.50062422	28	6.12395247	78	6.97728434
29	6.57398785	79	7.50665638	29	6.16847318	79	6.98250381
30	6.62167199	80	7.51248505	30	6.21043721	80	6.98754666
31	6.66671428	81	7.51811795	31	6.25004184	81	6.99241960
32	6.70931022	82	7.52356242	32	6.28746471	82	6.99712905
33	6.74963672	83	7.52882552	33	6.32286622	83	7.00168116
34	6.78785415	84	7.53391396	34	6.35639156	84	7.00608178
35	6.82410833	85	7.53883418	35	6.38817251	85	7.01033654
36	6.85853208	86	7.54359236	36	6.41832893	86	7.01445078
37	6.89124668	87	7.54819437	37	6.44697007	87	7.01842965
38	6.92236306	88	7.55264587	38	6.47419573	88	7.02227808
39	6.95198292	89	7.55695229	39	6.50009727	89	7.02600076
40	6.98019965	90	7.56111880	40	6.52475848	90	7.02960222
41	7.00709916	91	7.56515038	41	6.54825634	91	7.03308679
42	7.03276063	92	7.56905180	42	6.57066172	92	7.03645861
43	7.05725714	93	7.57282765	43	6.59203993	93	7.03972166
44	7.08065626	94	7.57648233	44	6.61245131	94	7.04287978
45	7.10302058	95	7.58002002	45	6.63195168	95	7.04593362
46	7.12440809	96	7.58344482	46	6.65059272	96	7.04889570
47	7.14487269	97	7.58676060	47	6.66842240	97	7.05176042
48	7.16446446	98	7.58997112	48	6.68548525	98	7.05453402
49	7.18323006	99	7.59307996	49	6.70182272	99	7.05721963
50	7.20121297	100	7.59609059	50	6.71747341	100	7.05982025

Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at 3 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	15 per cent.	Years	15 per cent.	Years	16 per cent.	Years	16 per cent.
1	0.86956522	51	6.30780221	1	0.86206897	51	5.93352706
2	1.55615178	52	6.32042599	2	1.53230676	52	5.94469589
3	2.11179700	53	6.33253245	3	2.06812245	53	5.95540453
4	2.57051537	54	6.34414778	4	2.50609579	54	5.96567645
5	2.95547950	55	6.35529650	5	2.87063837	55	5.97553362
6	3.28302103	56	6.36600158	6	3.17866480	56	5.98499660
7	3.56498164	57	6.37628458	7	3.44226550	57	5.99408468
8	3.81015682	58	6.38616575	8	3.67031217	58	6.00281597
9	4.02521626	59	6.39596412	9	3.86946204	59	6.01120748
10	4.21530947	60	6.40479761	10	4.04480828	60	6.01927520
11	4.38447558	61	6.41358306	11	4.20031384	61	6.02703421
12	4.53592734	62	6.42203601	12	4.33910853	62	6.03449835
13	4.67225216	63	6.43017257	13	4.46369698	63	6.04168199
14	4.79555727	64	6.43800578	14	4.57610741	64	6.04859677
15	4.90757610	65	6.44554940	15	4.67799970	65	6.05525495
16	5.00974773	66	6.45281606	16	4.77074542	66	6.06166779
17	5.10327681	67	6.45981776	17	4.85548783	67	6.06784596
18	5.18917943	68	6.46656581	18	4.93318748	68	6.07379956
19	5.26831861	69	6.47307098	19	5.00465732	69	6.07953816
20	5.34143215	70	6.47934344	20	5.07059003	70	6.08507081
21	5.40915449	71	6.48539288	21	5.13157943	71	6.09040612
22	5.47203423	72	6.49122847	22	5.18813757	72	6.09555225
23	5.53054818	73	6.49685894	23	5.24070828	73	6.10051696
24	5.58511272	74	6.50229257	24	5.28967823	74	6.10530761
25	5.63609310	75	6.50753728	25	5.33538579	75	6.10993123
26	5.68381106	76	6.51260055	26	5.37812840	76	6.11439447
27	5.72855111	77	6.51748956	27	5.41816855	77	6.11870369
28	5.77056577	78	6.52221112	28	5.45573877	78	6.12286494
29	5.81007995	79	6.52677172	29	5.49104580	79	6.12688399
30	5.84729465	80	6.53117758	30	5.52427407	80	6.13876634
31	5.88239001	81	6.53543459	31	5.55558862	81	6.13451723
32	5.91552798	82	6.53954841	32	5.58513760	82	6.13814166
33	5.94685456	83	6.54352444	33	5.61305438	83	6.14164444
34	5.97650171	84	6.54736784	34	5.63945932	84	6.14503011
35	6.00458901	85	6.551108353	35	5.66446138	85	6.14830306
36	6.03122507	86	6.55467624	36	5.68815937	86	6.151546747
37	6.05650876	87	6.55815048	37	5.71064316	87	6.15442731
38	6.08053030	88	6.56151056	38	5.73199463	88	6.15758644
39	6.10337215	89	6.56476063	39	5.75228857	89	6.16034850
40	6.12510986	90	6.56790465	40	5.77159342	90	6.16311700
41	6.14581277	91	6.57094642	41	5.78997193	91	6.16579532
42	6.16554464	92	6.57388959	42	5.80748176	92	6.16838666
43	6.18436417	93	6.57673764	43	5.82471592	93	6.17089412
44	6.20232556	94	6.57949393	44	5.84010334	94	6.17332067
45	6.21947885	95	6.58216168	45	5.85530914	95	6.17566915
46	6.23587038	96	6.58474397	46	5.86983508	96	6.17794228
47	6.25154310	97	6.58724377	47	5.88371982	97	6.18014271
48	6.26653685	98	6.58966394	48	5.89699922	98	6.18227293
49	6.28088869	99	6.59200721	49	5.90970660	99	6.18433537
50	6.29463310	100	6.59427620	50	5.92187293	100	6.18633236

TABLE VII.

Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at 3 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	17 per cent.	Years	17 per cent.	Years	18 per cent.	Years	18 per cent.
1	0.85470085	51	5.60117955	1	0.84745762	51	5.30408806
2	1.50918147	52	5.61113120	2	1.48674381	52	5.31301117
3	2.02621779	53	5.62067084	3	1.98597756	53	5.32156329
4	2.44482611	54	5.62981963	4	2.38648080	54	5.32976355
5	2.79053228	55	5.63859734	5	2.71477559	55	5.33762988
6	3.08073845	56	5.64702249	6	2.98866548	56	5.34517903
7	3.32771666	57	5.65511245	7	3.22054601	57	5.35242670
8	3.54036956	58	5.66288350	8	3.41931323	58	5.35938762
9	3.72531249	59	5.67035092	9	3.59151725	59	5.36607561
10	3.88756378	60	5.67752911	10	3.74208773	60	5.37250365
11	4.03099923	61	5.68443158	11	3.87480583	61	5.37868397
12	4.15865977	62	5.69107078	12	3.99262027	62	5.38462780
13	4.27296478	63	5.69745960	13	4.09786448	63	5.39034677
14	4.37586321	64	5.70360849	14	4.19240912	64	5.39585031
15	4.46894258	65	5.70952844	15	4.27777143	65	5.40114834
16	4.55350910	66	5.71522956	16	4.35519490	66	5.40624996
17	4.63064731	67	5.72072140	17	4.42570837	67	5.41116380
18	4.70126525	68	5.72601301	18	4.49017043	68	5.41589799
19	4.76612890	69	5.73111296	19	4.549330324	69	5.42046026
20	4.82588898	70	5.73602936	20	4.60371863	70	5.42485792
21	4.88110181	71	5.74076991	21	4.65393835	71	5.42909789
22	4.93224587	72	5.74534193	22	4.70041008	72	5.43318677
23	4.97973490	73	5.74975234	23	4.74352017	73	5.43713078
24	5.02392857	74	5.75400774	24	4.78360374	74	5.44093587
25	5.06514098	75	5.75811440	25	4.82095292	75	5.44460766
26	5.10364768	76	5.76207827	26	4.85582355	76	5.44815152
27	5.13969141	77	5.76590505	27	4.88844064	77	5.45157255
28	5.17348684	78	5.76960012	28	4.91900288	78	5.45486561
29	5.20522454	79	5.77316865	29	4.94768635	79	5.45806533
30	5.23507422	80	5.77661554	30	4.97464772	80	5.46114612
31	5.26318757	81	5.77994548	31	5.00002678	81	5.46412219
32	5.28970055	82	5.78316293	32	5.02394870	82	5.46699755
33	5.31473539	83	5.78627217	33	5.04652589	83	5.46977604
34	5.33840230	84	5.78927728	34	5.06785957	84	5.47246132
35	5.36080089	85	5.79218215	35	5.08804113	85	5.47505688
36	5.38202142	86	5.79499051	36	5.10715333	86	5.47756608
37	5.40214588	87	5.79770592	37	5.12527125	87	5.47999209
38	5.42124893	88	5.80033179	38	5.14246320	88	5.48233800
39	5.43939866	89	5.80287140	39	5.1579143	89	5.48460672
40	5.45665734	90	5.80532785	40	5.17431282	90	5.48680106
41	5.47308202	91	5.80770417	41	5.18907945	91	5.48892371
42	5.48872505	92	5.81000320	42	5.20313905	92	5.49097724
43	5.50363456	93	5.81222770	43	5.21653551	93	5.49296412
44	5.51785491	94	5.81438033	44	5.22930921	94	5.49488672
45	5.53142699	95	5.81646360	45	5.24149739	95	5.49674729
46	5.54438861	96	5.81847995	46	5.25313442	96	5.49854804
47	5.55677476	97	5.82043172	47	5.26425212	97	5.50029104
48	5.56861787	98	5.82232115	48	5.27487996	98	5.50197830
49	5.57994804	99	5.82415038	49	5.28504526	99	5.50361176
50	5.59079326	100	5.82592149	50	5.29477342	100	5.50519326

Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at 3 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	10 per cent.	Years	10 per cent.	Years	20 per cent.	Years	20 per cent.
1	0·84033613	51	5·03692511	1	0·83333333	51	4·79538515
2	1·46496356	52	5·04497129	2	1·44381223	52	4·80267758
3	1·94730452	53	5·05268164	3	1·91010889	53	4·80966460
4	2·33385539	54	5·06007360	4	2·27776400	54	4·81636213
5	2·64302344	55	5·06716345	5	2·57496647	55	4·82278505
6	2·90193631	56	5·07396644	6	2·82009884	56	4·82894728
7	3·12005295	57	5·08049683	7	3·02566044	57	4·83486183
8	3·30626179	58	5·08676801	8	3·20044664	58	4·84054092
9	3·46699937	59	5·09279251	9	3·35082624	59	4·84599599
10	3·60710564	60	5·09858214	10	3·48152434	60	4·85123779
11	3·73026530	61	5·10414798	11	3·59612046	61	4·85627644
12	3·83933039	62	5·10950023	12	3·69737591	62	4·86112123
13	3·93654999	63	5·11464943	13	3·78745494	63	4·86578175
14	4·02371839	64	5·11960414	14	3·86807783	64	4·87026581
15	4·10228505	65	5·12437334	15	3·94052921	65	4·87458158
16	4·17343373	66	5·12896528	16	4·00523612	66	4·87873658
17	4·23814062	67	5·13338778	17	4·06582523	67	4·88273799
18	4·29721801	68	5·13764820	18	4·12016552	68	4·88649228
19	4·35134726	69	5·14175355	19	4·16990041	69	4·89030607
20	4·40110418	70	5·14571044	20	4·21557244	70	4·89338852
21	4·44697870	71	5·14952513	21	4·25764225	71	4·89733561
22	4·48939033	72	5·15320359	22	4·29503552	72	4·90066248
23	4·52870036	73	5·15675146	23	4·33249466	73	4·90387102
24	4·56522163	74	5·16017410	24	4·36590824	74	4·90696611
25	4·59922638	75	5·16347652	25	4·39699847	75	4·90995237
26	4·63095266	76	5·16666384	26	4·42598728	76	4·91283421
27	4·66060951	77	5·16974040	27	4·45305934	77	4·91561582
28	4·68838127	78	5·17271068	28	4·47841605	78	4·91830119
29	4·71443109	79	5·17557885	29	4·50217896	79	4·92089410
30	4·73890394	80	5·17834892	30	4·52449259	80	4·92339818
31	4·76192965	81	5·18102467	31	4·54547668	81	4·92581688
32	4·78362199	82	5·18360974	32	4·56523825	82	4·92815349
33	4·80478643	83	5·18610758	33	4·58387320	83	4·93041115
34	4·82341564	84	5·18852149	34	4·60146772	84	4·93259285
35	4·84169376	85	5·19085464	35	4·61809953	85	4·93470146
36	4·85899691	86	5·19311004	36	4·63338382	86	4·93673972
37	4·87539408	87	5·19529058	37	4·64874924	87	4·93871023
38	4·89094800	88	5·19739902	38	4·66288854	88	4·94061552
39	4·90571578	89	5·19943800	39	4·67630931	89	4·94245796
40	4·91974959	90	5·20141024	40	4·68905950	90	4·94423935
41	4·93309712	91	5·20331758	41	4·70118319	91	4·94596340
42	4·94580209	92	5·20516293	42	4·71272027	92	4·94763069
43	4·95790466	93	5·20694832	43	4·72370773	93	4·94924375
44	4·96944174	94	5·20867588	44	4·73417945	94	4·95080452
45	4·98044737	95	5·21034765	45	4·74416665	95	4·95231483
46	4·99095295	96	5·21196560	46	4·75369812	96	4·95377648
47	5·00098753	97	5·21353162	47	4·76280247	97	4·95519117
48	5·01057799	98	5·21504752	48	4·77149834	98	4·95656053
49	5·01974924	99	5·21651502	49	4·77981454	99	4·95788615
50	5·02852445	100	5·21793581	50	4·78777025	100	4·95916952

Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at 3 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	21 per cent.	Years	21 per cent.	Years	22 per cent.	Years	22 per cent.
1	0.82644628	51	4.57595069	1	0.81967213	51	4.37571991
2	1.42326299	52	4.58259053	2	2.40329047	52	4.38179099
3	1.87430757	53	4.58895142	3	1.83982362	53	4.38760630
4	2.22703735	54	4.59504798	4	2.17852087	54	4.39317928
5	2.51032641	55	4.60089383	5	2.44885222	55	4.39852248
6	2.74275056	56	4.60650174	6	2.66953196	56	4.40364763
7	2.93680276	57	4.61188363	7	2.85301533	57	4.40856571
8	3.10119456	58	4.61705069	8	3.00791332	58	4.41328699
9	3.24218622	59	4.62201341	9	3.14036959	59	4.41782112
10	3.36439221	60	4.62678162	10	3.25488511	60	4.42217714
11	3.47128874	61	4.63136458	11	3.35483280	61	4.42636354
12	3.56554433	62	4.63577079	12	3.44279013	62	4.43038815
13	3.64924156	63	4.64000904	13	3.52076050	63	4.43425902
14	3.72402947	64	4.64408645	14	3.59032472	64	4.43798270
15	3.79123086	65	4.64801051	15	3.65274680	65	4.44156606
16	3.85191914	66	4.65178809	16	3.70904955	66	4.44501539
17	3.90697448	67	4.65542567	17	3.76007851	67	4.44833666
18	3.95712540	68	4.65892940	18	3.80649752	68	4.45153550
19	4.00298013	69	4.66230508	19	3.84890906	69	4.45461723
20	4.04505041	70	4.66555821	20	3.88778745	70	4.45758689
21	4.08376994	71	4.66869399	21	3.92355153	71	4.46044927
22	4.11950868	72	4.67171738	22	3.95651952	72	4.46320887
23	4.15258417	73	4.67463305	23	3.98701980	73	4.46587001
24	4.18327049	74	4.67744545	24	4.01529964	74	4.46843675
25	4.21180545	75	4.68015881	25	4.04158188	75	4.47091298
26	4.23839640	76	4.68277714	26	4.06606063	76	4.47330236
27	4.26322498	77	4.68530427	27	4.08890573	77	4.47560839
28	4.28645094	78	4.68774383	28	4.11026639	78	4.47783442
29	4.30821540	79	4.69009928	29	4.13027428	79	4.47998360
30	4.32864343	80	4.69237393	30	4.14904603	80	4.48205896
31	4.34784634	81	4.69457092	31	4.16668526	81	4.48406338
32	4.35592344	82	4.69669324	32	4.18328445	82	4.48599960
33	4.38296370	83	4.69874376	33	4.19892628	83	4.48787024
34	4.39904700	84	4.70072521	34	4.21363501	84	4.48967780
35	4.41424529	85	4.70264020	35	4.22762744	85	4.49142466
36	4.42862355	86	4.70449123	36	4.24081387	86	4.49311312
37	4.44221061	87	4.70628067	37	4.25329884	87	4.49474534
38	4.45514937	88	4.70801080	38	4.26513185	88	4.49632341
39	4.46739990	89	4.70968332	39	4.27635789	89	4.49784933
40	4.47903498	90	4.71130179	40	4.28701795	90	4.49932501
41	4.49009557	91	4.71286673	41	4.29714945	91	4.50075228
42	4.50061870	92	4.71438055	42	4.30678666	92	4.50213288
43	4.51063836	93	4.71584508	43	4.31596097	93	4.50346849
44	4.52018574	94	4.71726209	44	4.32470122	94	4.50476072
45	4.52928960	95	4.71863325	45	4.33303394	95	4.50601112
46	4.53797642	96	4.71996020	46	4.34098361	96	4.50722115
47	4.54627067	97	4.72124448	47	4.34857278	97	4.50839226
48	4.55419500	98	4.72248757	48	4.35582236	98	4.50952578
49	4.56177037	99	4.72369093	49	4.36275166	99	4.51062304
50	4.56901625	100	4.72485591	50	4.36937863	100	4.51168528



Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at 3 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	23 per cent.	Years	23 per cent.	Years	24 per cent.	Years	24 per cent.
1	0·81300813	51	4·19227758	1	0·80645161	51	4·02359722
2	1·38387075	52	4·19784998	2	1·36498117	52	4·02872994
3	1·80658563	53	4·20318700	3	1·77452728	53	4·03364535
4	2·13207321	54	4·20830107	4	2·08756480	54	4·03835494
5	2·39031689	55	4·21320377	5	2·33451460	55	4·04286944
6	2·60012090	56	4·21790592	6	2·53422791	56	4·04719888
7	2·77387621	57	4·22241765	7	2·69900904	57	4·05135263
8	2·92007985	58	4·22674845	8	2·83723045	58	4·05533946
9	3·04475309	59	4·23090721	9	2·95478712	59	4·05916759
10	3·15228195	60	4·23490226	10	3·05594980	60	4·06284475
11	3·24593704	61	4·23874144	11	3·14388840	61	4·06637818
12	3·32820695	62	4·24243195	12	3·22100523	62	4·06977453
13	3·40101878	63	4·24598121	13	3·28915403	63	4·07304067
14	3·46588808	64	4·24939527	14	3·34978817	64	4·07618218
15	3·52402315	65	4·25268045	15	3·40406318	65	4·07920490
16	3·57639914	66	4·25584254	16	3·45290932	66	4·08211418
17	3·62381168	67	4·25888703	17	3·49708395	67	4·08491511
18	3·66691644	68	4·26181911	18	3·53720091	68	4·08761246
19	3·70625854	69	4·26464368	19	3·57380412	69	4·09021076
20	3·74229498	70	4·26736537	20	3·60729920	70	4·09271430
21	3·77541168	71	4·26998859	21	3·63805994	71	4·09512713
22	3·80593688	72	4·27251749	22	3·66639616	72	4·09745309
23	3·83415144	73	4·27495603	23	3·69257261	73	4·09969584
24	3·86029714	74	4·27737095	24	3·71781697	74	4·10185882
25	3·88458327	75	4·27957682	25	3·73932603	75	4·10394533
26	3·90719184	76	4·28176602	26	3·76027085	76	4·10595848
27	3·92828198	77	4·28387876	27	3·77980075	77	4·10790125
28	3·94799335	78	4·28591810	28	3·79804671	78	4·10977645
29	3·96644906	79	4·28788697	29	3·81512411	79	4·11158678
30	3·98375807	80	4·28978813	30	3·83113492	80	4·11333478
31	4·00001714	81	4·29162423	31	3·84616969	81	4·11502291
32	4·01531250	82	4·29339779	32	3·86030903	82	4·11665348
33	4·02972126	83	4·29511122	33	3·87362497	83	4·11822872
34	4·04331256	84	4·29676681	34	3·88618207	84	4·11975073
35	4·05614859	85	4·29836676	35	3·89803836	85	4·12122154
36	4·06828545	86	4·29991315	36	3·90924616	86	4·12264308
37	4·07977387	87	4·30140800	37	3·91985274	87	4·12401720
38	4·09065982	88	4·30285322	38	3·92990094	88	4·12534565
39	4·10098509	89	4·30425063	39	3·93742967	89	4·12663012
40	4·11078774	90	4·30560199	40	3·94847434	90	4·12787224
41	4·12010249	91	4·30690897	41	3·95706726	91	4·12907354
42	4·12896111	92	4·30817319	42	3·96523798	92	4·13023550
43	4·13739271	93	4·30939619	43	3·97301354	93	4·13135954
44	4·14542401	94	4·31057943	44	3·98041878	94	4·13244702
45	4·15307960	95	4·31172434	45	2·98747652	95	4·13349925
46	4·16038210	96	4·31283227	46	3·99420779	96	4·13451746
47	4·16735243	97	4·31390452	47	4·00063200	97	4·13550287
48	4·17400990	98	4·31494234	48	4·00676705	98	4·13645662
49	4·18037240	99	4·31594694	49	4·01262954	99	4·13737982
50	4·18645649	100	4·31691946	50	4·01823484	100	4·13827353

Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at 3 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	25 per cent.	Years	25 per cent.	Years	25 per cent.	Years	25 per cent.
1	0.80000000	26	3.62399868	51	3.86796585	76	3.94401871
2	1.34660033	27	3.64213529	52	3.87270896	77	3.94581122
3	1.74358685	28	3.65907340	53	3.87725080	78	3.94754133
4	2.04487668	29	3.67492130	54	3.88160207	79	3.94921152
5	2.28125829	30	3.68977468	55	3.88577272	80	3.95082416
6	2.47159213			56	3.88977207		
7	2.62807701	31	3.70171840	57	3.89360880	81	3.95238151
8	2.75895261	32	3.71682798	58	3.89729107	82	3.95388571
9	2.86998516	33	3.72917088	59	3.90082651	83	3.95533882
10	2.96533078	34	3.74080748	60	3.90422226	84	3.95674279
		35	3.75179207			85	3.95808949
11	3.04806078	39	3.76217353	61	3.90748506	86	3.95941071
12	3.12049395	37	3.77199605	62	3.91062107	87	3.96067815
13	3.18441376	38	3.78129961	63	3.91363666	88	3.96190344
14	3.24121436	39	3.79012054	64	3.91653700	89	3.96308813
15	3.29200137	40	3.79849186	65	3.91932750	90	3.96422373
16	3.33766285			66	3.92201313		
17	3.37892027	41	3.80644372	67	3.92459859	91	3.96534166
18	3.41636588	42	3.81400366	68	3.92708831	92	3.96651329
19	3.45049036	43	3.82119687	69	3.92948649	93	3.96744992
20	3.48170373	44	3.82804650	70	3.93177908	94	3.96845281
		45	3.83457379			95	3.96942317
21	3.51035126	46	3.84079833	71	3.93402385	96	3.97036215
22	3.53672578	47	3.84673816	72	3.93617036	97	3.97127085
23	3.56107725	48	3.85240996	73	3.92823998	98	3.97215035
24	3.58362036	49	3.85782915	74	3.94023591	99	3.97300165
25	3.60454051	50	3.86301003	75	3.94216119	100	3.97382575



**TABLE VIII.**  
**FOR**  
**VALUING MINERAL AND OTHER PROPERTIES.**



Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at  $3\frac{1}{2}$  per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	4 per cent.	Years	4 per cent.	Years	5 per cent.	Years	5 per cent.
1	0.96153846	51	21.13201494	1	0.95238095	51	17.44544161
2	1.88181986	52	21.26560757	2	1.84706149	52	17.53638810
3	2.76293330	53	21.39449319	3	2.68864776	53	17.62394045
4	3.60683820	54	21.51884394	4	3.48127427	54	17.70823622
5	4.41537415	55	21.63882521	5	4.22866286	55	17.78940661
6	5.19026988	56	21.75459601	6	4.93417298	56	17.86757685
7	5.93315140	57	21.86630921	7	5.60084480	57	17.94286655
8	6.64554948	58	21.97411174	8	6.22520486	58	18.01538984
9	7.32890640	59	22.07814490	9	6.82845530	59	18.08525590
10	7.98458223	60	22.17854463	10	7.39418726	60	18.15256901
11	8.61386051	61	22.27544161	11	7.93071941	61	18.21742888
12	9.21795350	62	22.36896161	12	8.43996175	62	18.27993089
13	9.79800697	63	22.45922569	13	8.92366560	63	18.34016634
14	10.35510463	64	22.54635030	14	9.38343964	64	18.39822259
15	10.89027219	65	22.63044743	15	9.82076424	65	18.45418320
16	11.40448117	66	22.71162503	16	10.23700398	66	18.50812832
17	11.89865227	67	22.78998699	17	10.63341875	67	18.56013470
18	12.37365863	68	22.86563319	18	11.01117360	68	18.61027579
19	12.83032881	69	22.93866003	19	11.37134753	69	18.65862213
20	13.26944946	70	23.00916019	20	11.71494125	70	18.70524126
21	13.69176795	71	23.07722297	21	12.04288419	71	18.75019797
22	14.09799461	72	23.14293439	22	12.35604066	72	18.79355442
23	14.48880504	73	23.20637735	23	12.65521553	73	18.83537025
24	14.86484209	74	23.26763169	24	12.94115921	74	18.87570270
25	15.22671774	75	23.32677432	25	13.21457214	75	18.91460670
26	15.57521483	76	23.38387935	26	13.47610887	76	18.95213497
27	15.91028880	77	23.43901828	27	13.72638181	77	18.98833821
28	16.23306916	78	23.49225988	28	13.96596448	78	19.02326502
29	16.54386089	79	23.53868290	29	14.19539456	79	19.05369423
30	16.84314589	80	23.59331428	30	14.41517665	80	19.08947455
31	17.13138406	81	23.64125274	31	14.62578471	81	19.12084536
32	17.40901467	82	23.68754530	32	14.82766440	82	19.15111601
33	17.67645726	83	23.73224934	33	15.02123506	83	19.18032644
34	17.93411277	84	23.77542012	34	15.20689166	84	19.20851498
35	18.18236454	85	23.81711097	35	15.38500656	85	19.23571854
36	18.42157912	86	23.85737323	36	15.55593098	86	19.26197255
37	18.65210718	87	23.89625646	37	15.71999637	87	19.28731113
38	18.87428430	88	23.93380854	38	15.87751667	88	19.31176716
39	19.08843171	89	23.97007548	39	16.02878754	89	19.33537218
40	19.29485698	90	24.00510189	40	16.17408954	90	19.35815666
41	19.49385477	91	24.03893052	41	16.31368810	91	19.38014978
42	19.68570725	92	24.07160286	42	16.44783466	92	19.40137977
43	19.87068499	93	24.10315887	43	16.57676770	93	19.42187378
44	20.04904734	94	24.13363694	44	16.70071340	94	19.44165782
45	20.22104293	95	24.16307440	45	16.81988646	95	19.46075717
46	20.38691024	96	24.19150595	46	16.93449080	96	19.47919591
47	20.54687800	97	24.21896930	47	17.04472015	97	19.49699746
48	20.70116589	98	24.24543436	48	17.15075884	98	19.51418431
49	20.84998443	99	24.27111581	49	17.25278226	99	19.53077805
50	20.99353605	100	24.29586324	50	17.35095670	100	19.54679955

Present Value of £1 per Annum for  $n$  years; Redemption of Capital being at  $3\frac{1}{2}$  per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	6 per cent.	Years	6 per cent.	Years	8 per cent.	Years	8 per cent.
1	0.94339623	51	14.85408150	1	0.92592593	51	11.45192496
2	1.81356385	52	14.91996511	2	1.75008600	52	11.49104523
3	2.61825218	53	14.98329369	3	2.48796954	53	11.52857360
4	3.36415868	54	15.04417770	4	3.15207694	54	11.56458443
5	4.05710171	55	15.10272198	5	3.75260750	55	11.59914787
6	4.70216026	56	15.15902619	6	4.29796578	56	11.63233022
7	5.30378787	57	15.21318504	7	4.79513979	57	11.66419416
8	5.86590610	58	15.26528859	8	5.24998743	58	11.69479896
9	6.39198169	59	15.31542254	9	5.66745617	59	11.72420076
10	6.88509076	60	15.36366848	10	6.05175334	60	11.75245273
11	7.34797233	61	15.41010412	11	6.40647963	61	11.77960525
12	7.78307334	62	15.45480349	12	6.73473466	62	11.80570612
13	8.19258657	63	15.49783721	13	7.03920125	63	11.83080073
14	8.57848288	64	15.53927262	14	7.32221326	64	11.85493216
15	8.94253860	65	15.57917390	15	7.58581053	65	11.87814132
16	9.28635904	66	15.61604066	16	7.83178390	66	11.90046713
17	9.61139850	67	15.65461674	17	8.06171197	67	11.92194663
18	9.91897774	68	15.69027276	18	8.27699180	68	11.94261501
19	10.21029895	69	15.72462396	19	8.47886419	69	11.96250584
20	10.48645876	70	15.75772145	20	8.66843504	70	11.98165105
21	10.74845964	71	15.78961407	21	8.84669316	71	12.00008109
22	10.99721972	72	15.82034860	22	9.01452540	72	12.01782498
23	11.23358157	73	15.84996976	23	9.17272948	73	12.03491043
24	11.45831980	74	15.87852040	24	9.32202495	74	12.05136386
25	11.67214775	75	15.90604151	25	9.46306248	75	12.06721049
26	11.87572345	76	15.93257234	26	9.59643200	76	12.08247440
27	12.06965490	77	15.95815060	27	9.72266957	77	12.09717863
28	12.25450471	78	15.98281228	28	9.84226344	78	12.11134516
29	12.43079427	79	16.00428643	29	9.95565924	79	12.12367203
30	12.59900747	80	16.02952286	30	10.06326456	80	12.13814833
31	12.75959397	81	16.05163672	31	10.16545293	81	12.15082435
32	12.91297221	82	16.07296403	32	10.26256729	82	12.16304146
33	13.05953205	83	16.09353407	33	10.35492306	83	12.17481732
34	13.19963714	84	16.11337494	34	10.44281086	84	12.18616880
35	13.33362715	85	16.13251362	35	10.52649891	85	12.19711208
36	13.46181961	86	16.15097598	36	10.60623513	86	12.20766626
37	13.58451178	87	16.16878689	37	10.68224903	87	12.21783536
38	13.70198216	88	16.18597027	38	10.75475338	88	12.22764447
39	13.81449197	89	16.20254902	39	10.82394574	89	12.23710360
40	13.92228646	90	16.21854526	40	10.89000975	90	12.24622588
41	14.02559610	91	16.23398012	41	10.95311637	91	12.25502385
42	14.12463762	92	16.24887402	42	11.01342490	92	12.26350957
43	14.21961513	93	16.26324656	43	11.07108404	93	12.27169464
44	14.31072092	94	16.27711652	44	11.12623269	94	12.27959013
45	14.39813629	95	16.29050211	45	11.17900076	95	12.28720675
46	14.48203236	96	16.30342066	46	11.22950986	96	12.29455471
47	14.56257072	97	16.31588900	47	11.27787397	97	12.30164388
48	14.63990418	98	16.32792327	48	11.32420009	98	12.30848371
49	14.71417714	99	16.33953896	49	11.36858861	99	12.31508329
50	14.78552641	100	16.35075102	50	11.41113396	100	12.32145135

TABLE VIII.

Present Value of £1 per Annum for  $n$  years; Redemption of Capital being at  $3\frac{1}{2}$  per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	10 per cent.	Years	10 per cent.	Years	12 per cent.	Years	12 per cent.
1	0.90909091	51	9.31779189	1	0.89285714	51	7.85412909
2	1.69090154	52	9.34367369	2	1.63558913	52	7.87251034
3	2.37003790	53	9.36847137	3	2.26278040	53	7.89010661
4	2.96514936	54	9.39223788	4	2.79915132	54	7.90695738
5	3.49062834	55	9.41502300	5	3.26284103	55	7.92349968
6	3.95775949	56	9.43687362	6	3.66746092	56	7.93856830
7	4.37551561	57	9.45783394	7	4.02342448	57	7.95339597
8	4.75112093	58	9.47794560	8	4.33883439	58	7.96761346
9	5.09045730	59	9.49724794	9	4.62008989	59	7.98124978
10	5.39836221	60	9.51577809	10	4.87231210	60	7.99433226
11	5.67885080	61	9.53357116	11	5.09964799	61	8.00688668
12	5.93528347	62	9.55066034	12	5.30549155	62	8.01893739
13	6.17049424	63	9.56707709	13	5.49204727	63	8.03050742
14	6.38688986	64	9.58285116	14	5.66345287	64	8.04161850
15	6.58652753	65	9.59801076	15	5.81987252	65	8.05229121
16	6.77117613	66	9.61258266	16	5.96356866	66	8.06254504
17	6.94236503	67	9.62659226	17	6.09595775	67	8.07239848
18	7.10142334	68	9.64006364	18	6.21825423	68	8.08186901
19	7.24951169	69	9.65301974	19	6.33150526	69	8.09097325
20	7.38764809	70	9.66548233	20	6.43661862	70	8.09972697
21	7.51672922	71	9.67747209	21	6.53438514	71	8.10814513
22	7.63754799	72	9.68900876	22	6.62549697	72	8.11624197
23	7.75080815	73	9.70011108	23	6.71056250	73	8.12403101
24	7.85713650	74	9.71079692	24	6.79011871	74	8.13152514
25	7.95709310	75	9.72108332	25	6.86464130	75	8.13873659
26	8.05117998	76	9.73098650	26	6.93455325	76	8.14567703
27	8.13984844	77	9.74052195	27	7.00023190	77	8.15235759
28	8.22350532	78	9.74970445	28	7.06201497	78	8.15878885
29	8.30251836	79	9.75769110	29	7.12020561	79	8.16438095
30	8.37722078	80	9.76706634	30	7.17507674	80	8.17094341
31	8.44791524	81	9.77527208	31	7.22687473	81	8.17668556
32	8.51487727	82	9.78317758	32	7.27582255	82	8.18221611
33	8.57835827	83	9.79079461	33	7.32212247	83	8.18754348
34	8.63858804	84	9.79813441	34	7.36595843	84	8.19267566
35	8.69577714	85	9.80520773	35	7.40749809	85	8.19762033
36	8.75011979	86	9.81202487	36	7.44689455	86	8.20238480
37	8.80179064	87	9.81859566	37	7.48428793	87	8.20697607
38	8.85095633	88	9.82429556	38	7.51980672	88	8.21140086
39	8.89776684	89	9.83103558	39	7.55356893	89	8.21566557
40	8.94236164	90	9.83692241	40	7.58568320	90	8.21977636
41	8.98486987	91	9.84259831	41	7.61624963	91	8.22373910
42	9.02541115	92	9.84807125	42	7.64536068	92	8.22755942
43	9.06409655	93	9.85334887	43	7.67310184	93	8.23124275
44	9.10102930	94	9.85843846	44	7.69955228	94	8.23479422
45	9.13630545	95	9.86334706	45	7.72478546	95	8.23821883
46	9.17001450	96	9.86808139	46	7.74886957	96	8.24152132
47	9.20223993	97	9.87264791	47	7.77186804	97	8.24470627
48	9.23305977	98	9.87705284	48	7.79383996	98	8.24777805
49	9.26254691	99	9.88130212	49	7.81484039	99	8.25074086
50	9.29076963	100	9.88540149	50	7.83492075	100	8.25359874



Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at  $\frac{3}{4}$  per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	15 per cent.	Years	15 per cent.	Years	18 per cent.	Years	18 per cent.
1	0.86956522	51	6.35640769	1	0.84745763	51	5.33841368
2	1.55908830	52	6.36844166	2	1.48942399	52	5.34689919
3	2.11893955	53	6.37995165	3	1.99229309	53	5.35501042
4	2.58230357	54	6.39096480	4	2.39663815	54	5.36276712
5	2.97193271	55	6.40150647	5	2.72865164	55	5.37018772
6	3.30394790	56	6.41160046	6	3.00599809	56	5.37728950
7	3.59009071	57	6.42126910	7	3.24102365	57	5.38408864
8	3.83911577	58	6.43053334	8	3.44261755	58	5.39060029
9	4.05768395	59	6.43941290	9	3.61734292	59	5.39683871
10	4.25095301	60	6.44792630	10	3.77015097	60	5.40281727
11	4.42297893	61	6.45609101	11	3.90484722	61	5.40854856
12	4.57699526	62	6.46392347	12	4.02440481	62	5.41404441
13	4.71561154	63	6.47143920	13	4.13118030	63	5.41931598
14	4.84095693	64	6.47865286	14	4.22706565	64	5.42437381
15	4.95478586	65	6.48557826	15	4.31359733	65	5.42922781
16	5.05855708	66	6.49222850	16	4.39203612	66	5.43388735
17	5.15349341	67	6.49861595	17	4.46342627	67	5.43836131
18	5.24062759	68	6.50475232	18	4.52864010	68	5.44265805
19	5.32083787	69	6.51064871	19	4.58841198	69	5.44678550
20	5.39487587	70	6.51631564	20	4.64336460	70	5.45075119
21	5.46338859	71	6.52176308	21	4.69402939	71	5.45456221
22	5.52693603	72	6.52700050	22	4.74086269	72	5.45822532
23	5.58600536	73	6.53203690	23	4.78425854	73	5.46174693
24	5.64102236	74	6.53688082	24	4.82455091	74	5.46513310
25	5.69236084	75	6.54154037	25	4.86206243	75	5.46838963
26	5.74035031	76	6.54602329	26	4.89703024	76	5.47152198
27	5.78528236	77	6.55033692	27	4.92969247	77	5.47453539
28	5.82741600	78	6.55448827	28	4.96025238	78	5.47743481
29	5.86698205	79	6.55809691	29	4.98889018	79	5.47995469
30	5.90418692	80	6.56233048	30	5.01576627	80	5.48291038
31	5.93921570	81	6.56603376	31	5.04102386	81	5.48549533
32	5.97223491	82	6.56959960	32	5.06479122	82	5.48798390
33	6.00339473	83	6.57303354	33	5.08718359	83	5.49037999
34	6.03283097	84	6.57634084	34	5.10830479	84	5.49268732
35	6.05066677	85	6.57952652	35	5.12824859	85	5.49490945
36	6.08701401	86	6.58259539	36	5.14709993	86	5.49704976
37	6.11197460	87	6.58555203	37	5.16493589	87	5.49911149
38	6.13564156	88	6.58840085	38	5.18182663	88	5.50109773
39	6.15809996	89	6.59114603	39	5.19783612	89	5.50301146
40	6.17942776	90	6.59379159	40	5.21302282	90	5.50485550
41	6.19969654	91	6.59634138	41	5.22744024	91	5.50663254
42	6.21897213	92	6.59879908	42	5.25363428	92	5.50834518
43	6.23731520	93	6.60116821	43	5.25415959	93	5.50999591
44	6.25478172	94	6.60345214	44	5.26654840	94	5.51158709
45	6.27142344	95	6.60565411	45	5.27834192	95	5.51312100
46	6.28728827	96	6.60777722	46	5.28957566	96	5.51459981
47	6.30242660	97	6.60982444	47	5.30028234	97	5.51602561
48	6.31686169	98	6.61179862	48	5.31049233	98	5.51740041
49	6.33064985	99	6.61370250	49	5.32023374	99	5.51872612
50	6.34382076	100	6.61553869	50	5.32953275	100	5.52000457

Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at  $3\frac{1}{2}$  per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	20 per cent.	Year	20 per cent.	Years	25 per cent.	Years	25 per cent.
1	0·83333333	51	4·82342493	1	0·80000000	51	3·88618810
2	1·44633973	52	4·83035117	2	1·34879867	52	3·89068293
3	1·91595040	53	4·83696994	3	1·74845294	53	3·89497583
4	2·28701519	54	4·84329758	4	2·05232973	54	3·89907786
5	2·58744682	55	4·84934939	5	2·29104851	55	3·90299908
6	2·83552635	56	4·85513967	6	2·48343420	56	3·90674906
7	3·04372777	57	4·86086180	7	2·64169739	57	3·91033669
8	3·22085416	58	4·86598833	8	2·77410481	58	3·91377030
9	3·37329558	59	4·87107102	9	2·88645268	59	3·91705771
10	3·50580285	60	4·87594092	10	2·98292543	60	3·92020622
11	3·62198153	61	4·88060840	11	3·06661956	61	3·92322272
12	3·72461744	62	4·88508325	12	3·13987566	62	3·92611365
13	3·81589712	63	4·88937466	13	3·20449580	63	3·92888510
14	3·89756074	64	4·89349129	14	3·26189002	64	3·93154277
15	3·97101052	65	4·89744132	15	3·31317740	65	3·93409206
16	4·03738806	66	4·90123245	16	3·35925750	66	3·93653805
17	4·09763632	67	4·90487199	17	3·40086162	67	3·93888552
18	4·15253351	68	4·90836680	18	3·43859041	68	3·94113901
19	4·20273444	69	4·91172342	19	3·47294183	69	3·94330279
20	4·24879089	70	4·91494801	20	3·50433216	70	3·94538091
21	4·29117167	71	4·91804641	21	3·53311214	71	3·94737720
22	4·33027765	72	4·92102415	22	3·55957931	72	3·94929528
23	4·36645368	73	4·92388649	23	3·58398783	73	3·95113859
24	4·39999801	74	4·92663841	24	3·60655604	74	3·95291040
25	4·43116993	75	4·92928465	25	3·62747256	75	3·95461379
26	4·46019595	76	4·93182969	26	3·64690124	76	3·95625171
27	4·48727478	77	4·93427782	27	3·66498503	77	3·95782693
28	4·51258151	78	4·93663309	28	3·68184927	78	3·95934212
29	4·53627102	79	4·93867985	29	3·69760427	79	3·96065861
30	4·55848079	80	4·94108037	30	3·71234754	80	3·96220235
31	4·57933329	81	4·94317956	31	3·72616558	81	3·96355208
32	4·59893800	82	4·94520030	32	3·73913541	82	3·96485115
33	4·61739307	83	4·94714578	33	3·75132578	83	3·96610163
34	4·63478672	84	4·94901904	34	3·76279834	84	3·96730551
35	4·65119854	85	4·95082297	35	3·77360844	85	3·96846467
36	4·66670045	86	4·95256034	36	3·78380600	86	3·96958090
37	4·68135765	87	4·95423381	37	3·79343509	87	3·97065592
38	4·69522934	88	4·95584589	38	3·80253957	88	3·97169137
39	4·70836947	89	4·95739899	39	3·81115352	89	3·97268882
40	4·72082722	90	4·95889544	40	3·81931169	90	3·97364976
41	4·73264759	91	4·96033743	41	3·82704486	91	3·97457562
42	4·74387180	92	4·96172708	42	3·83438117	92	3·97546777
43	4·75453769	93	4·96306640	43	3·84134638	93	3·97632752
44	4·76468004	94	4·96435733	44	3·84796414	94	3·97715613
45	4·77433090	95	4·96560173	45	3·85422561	95	3·97795478
46	4·78351985	96	4·96680137	46	3·86024252	96	3·97872462
47	4·79227422	97	4·96795795	47	3·86594160	97	3·97946677
48	4·80061929	98	4·96907309	48	3·87137049	98	3·98018226
49	4·80857851	99	4·97014836	49	3·87654497	99	3·98087211
50	4·81617365	100	4·97118527	50	3·88147965	100	3·98153729

8

TABLE IX.

FOR

VALUING MINERAL AND OTHER PROPERTIES.

Yrs.	5%	6%	7%	8%	9%	10%
$\frac{1}{2}$				0.4762372		
$1\frac{1}{2}$				1.3511512		
$2\frac{1}{2}$				2.1355013		
$3\frac{1}{2}$				2.8421207		

Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at 4 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	5 per cent.	Years	5 per cent.	Years	6 per cent.	Years	6 per cent.
1	0.95238095	51	17.77498127	1	0.94339623	51	15.09232358
2	1.85117967	52	17.86284506	2	1.77553386	52	15.15562012
3	2.70015916	53	17.94715260	3	2.62916745	53	15.21626610
4	3.50274910	54	18.02805444	4	3.38420876	54	15.27438076
5	4.26208201	55	18.10569440	5	4.08785431	55	15.33007743
6	4.98102472	56	18.18020966	6	4.74469052	56	15.38346370
7	5.66220597	57	18.25173113	7	5.35878077	57	15.43464181
8	6.30804060	58	18.32038400	8	5.93373800	58	15.48370905
9	6.92075084	59	18.38628770	9	6.47278548	59	15.53075788
10	7.50238514	60	18.44955639	10	6.97880808	60	15.57587633
11	8.05483478	61	18.51029920	11	7.45439554	61	15.61914821
12	8.57984864	62	18.56862064	12	7.90187935	62	15.66065333
13	9.07904626	63	18.62462018	13	8.32336418	63	15.70046770
14	9.55392960	64	18.67839328	14	8.72075482	64	15.73866376
15	10.00589343	65	18.73003124	15	9.09577943	65	15.77531063
16	10.43623469	66	18.77962133	16	9.45000952	66	15.81047415
17	10.84616084	67	18.82724705	17	9.78487731	67	15.84421714
18	11.23679741	68	18.87298835	18	10.10169087	68	15.87659957
19	11.60919479	69	18.92050099	19	10.40164729	69	15.91020962
20	11.96433427	70	18.95912065	20	10.68584416	70	15.93750907
21	12.30313365	71	18.99965508	21	10.95528971	71	15.96614298
22	12.62645216	72	19.03859225	22	11.21091175	72	15.99363021
23	12.93509507	73	19.07599657	23	11.45356549	73	16.02001840
24	13.22981771	74	19.11192967	24	11.68404046	74	16.04535307
25	13.51132927	75	19.14645065	25	11.90306673	75	16.06967773
26	13.78029623	76	19.17961612	26	12.11132040	76	16.09303398
27	14.03735130	77	19.21148035	27	12.30943295	77	16.11546160
28	14.28306677	78	19.24209535	28	12.49797295	78	16.13699867
29	14.51801619	79	19.27151098	29	12.67749536	79	16.15768159
30	14.74271766	80	19.29977501	30	12.84849963	80	16.17754519
31	14.95766552	81	19.32693332	31	13.01145553	81	16.19662282
32	15.16332653	82	19.35302987	32	13.16680143	82	16.21494644
33	15.36014159	83	19.37810679	33	13.31494690	83	16.23254657
34	15.54852760	84	19.40220446	34	13.45627497	84	16.24945246
35	15.72887882	85	19.42536178	35	13.59114421	85	16.26569222
36	15.90155852	86	19.44761583	36	13.71989070	86	16.28129259
37	16.06695021	87	19.46900238	37	13.84282966	87	16.29627936
38	16.22535878	88	19.48955571	38	13.96025699	88	16.31067719
39	16.37711185	89	19.50930858	39	14.07245083	89	16.32450962
40	16.52251070	90	19.52829260	40	14.17967275	90	16.33779934
41	16.66184125	91	19.54653802	41	14.28216894	91	16.35056802
42	16.79537502	92	19.56401739	42	14.38017133	92	16.36283650
43	16.92336996	93	19.58092819	43	14.47389855	93	16.37462468
44	17.04607118	94	19.59712748	44	14.56355690	94	16.38595163
45	17.16371179	95	19.61269758	45	14.64934110	95	16.39683577
46	17.27651354	96	19.62766315	46	14.73143515	96	16.40729462
47	17.38468743	97	19.64204787	47	14.81001296	97	16.41734509
48	17.48843432	98	19.65587450	48	14.88523606	98	16.42700334
49	17.58794553	99	19.66916480	49	14.95729917	99	16.43628485
50	17.68340320	100	19.68193985	50	15.02625076	100	16.44520457

Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at 4 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	8 per cent.	Years	8 per cent.	Years	10 per cent.	Years	10 per cent.
1	0.92592593	51	11.59301339	1	0.90909090	51	9.41098085
2	1.75378267	52	11.63032451	2	1.69435216	52	9.43555353
3	2.49782353	53	11.66600528	3	2.37897817	53	9.45902465
4	3.16967212	54	11.70013456	4	2.98071437	54	9.48144979
5	3.77890227	55	11.73278682	5	3.51336873	55	9.50288123
6	4.33347094	56	11.74603239	6	3.98784660	56	9.52336817
7	4.84004587	57	11.79393772	7	4.41287548	57	9.54295693
8	5.30425662	58	11.82256569	8	4.79552293	58	9.56169124
9	5.73088916	59	11.84997578	9	5.14157341	59	9.57961231
10	6.12403832	60	11.87562431	10	5.45580691	60	9.59675905
11	6.48722823	61	11.90136464	11	5.74220796	61	9.61316823
12	6.82350853	62	11.92544738	12	6.00412462	62	9.62887463
13	7.13553161	63	11.94852050	13	6.24439067	63	9.64391111
14	7.42561540	64	11.97062950	14	6.46542083	64	9.65830879
15	7.69579446	65	11.99181766	15	6.66928545	65	9.67209715
16	7.94786208	66	12.01212600	16	6.85776989	66	9.68530413
17	8.18340503	67	12.03159353	17	7.03242189	67	9.69795619
18	8.40383251	68	12.05025735	18	7.19458993	68	9.71007847
19	8.61040035	69	12.06960933	19	7.34545430	69	9.72264000
20	8.80423129	70	12.08531327	20	7.48605253	70	9.73282781
21	8.98633225	71	12.10177089	21	7.61730040	71	9.74349904
22	9.15760886	72	12.11755601	22	7.74000930	72	9.75372889
23	9.31887792	73	12.13269762	23	7.85490070	73	9.76353682
24	9.47087802	74	12.14722333	24	7.96261829	74	9.77294132
25	9.61427862	75	12.16115946	25	8.06373819	75	9.78195997
26	9.74968840	76	12.17453112	26	8.15877761	76	9.79060952
27	9.87766408	77	12.18736224	27	8.24820426	77	9.79890592
28	9.99870265	78	12.19967567	28	8.33243238	78	9.80686438
29	10.11327533	79	12.21149321	29	8.41184853	79	9.81449937
30	10.22180299	80	12.22283566	30	8.48679588	80	9.82182468
31	10.32467463	81	12.23372291	31	8.55758833	81	9.82885351
32	10.42224803	82	12.24417394	32	8.62451197	82	9.83559840
33	10.51485277	83	12.25420689	33	8.68782810	83	9.84207133
34	10.60279301	84	12.26383906	34	8.74777587	84	9.84828373
35	10.68634979	85	12.27308708	35	8.80457453	85	9.85424656
36	10.76578330	86	12.28196671	36	8.85842551	86	9.85997020
37	10.84133467	87	12.29049316	37	8.90951418	87	9.86546465
38	10.91322772	88	12.29868090	38	8.95801137	88	9.87073942
39	10.98167047	89	12.30654377	39	9.00407482	89	9.87580359
40	11.04685654	90	12.31409506	40	9.04785043	90	9.88066588
41	11.10896627	91	12.32134743	41	9.08947324	91	9.88533460
42	11.16816795	92	12.32831307	42	9.12906854	92	9.88981770
43	11.22461870	93	12.33500359	43	9.16675264	93	9.89412279
44	11.27846544	94	12.34143010	44	9.20263372	94	9.89825713
45	11.32984563	95	12.34760330	45	9.23681245	95	9.90222771
46	11.37888810	96	12.35353338	46	9.26938273	96	9.90604118
47	11.42571362	97	12.35923016	47	9.30043214	97	9.90970393
48	11.47043555	98	12.36470299	48	9.33004253	98	9.91322206
49	11.51316039	99	12.36996084	49	9.35829042	99	9.91660142
50	11.55398826	100	12.37501237	50	9.38524748	100	9.91984763

Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at 4 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	12 per cent.	Years	12 per cent.	Years	15 per cent.	Years	15 per cent.
1	0.89285714	51	7.92023690	1	0.86956522	51	6.39963754
2	1.63881748	52	7.93763410	2	1.56202144	52	6.41099106
3	2.27092839	53	7.95423799	3	2.12608293	53	6.42181794
4	2.81301829	54	7.97008969	4	2.59410071	54	6.43214622
5	3.28270189	55	7.98522780	5	2.98840091	55	6.44200216
6	3.69328178	56	7.99968858	6	3.32488920	56	6.45141036
7	4.05499198	57	8.01350607	7	3.61520336	57	6.46039390
8	4.37583462	58	8.02671234	8	3.86805549	58	6.46897443
9	4.66215697	59	8.03933757	9	4.09009677	59	6.47717232
10	4.91905827	60	8.05141018	10	4.28649300	60	6.48500671
11	5.15068220	61	8.06295699	11	4.46131736	61	6.49249561
12	5.36043073	62	8.07400332	12	4.61782475	62	6.49965600
13	5.55112305	63	8.08457304	13	4.75864786	63	6.50650386
14	5.72511524	64	8.09468872	14	4.88593842	64	6.51305431
15	5.88439170	65	8.10437174	15	5.00147292	65	6.51932157
16	6.03063566	66	8.11364227	16	5.10673069	66	6.52531912
17	6.16528429	67	8.12251944	17	5.20295364	67	6.53105967
18	6.28957209	68	8.13102136	18	5.29119207	68	6.53655525
19	6.40456544	69	8.13982771	19	5.37234029	69	6.54224524
20	6.51119028	70	8.14696723	20	5.44716454	70	6.54685647
21	6.61025452	71	8.15444290	21	5.51632512	71	6.55168313
22	6.70246628	72	8.16160687	22	5.58039417	72	6.55630689
23	6.78844887	73	8.16847307	23	5.63986983	73	6.56073697
24	6.86875311	74	8.17505472	24	5.69518792	74	6.56498208
25	6.94381937	75	8.18136439	25	5.74673134	75	6.56905051
26	7.01422721	76	8.18741404	26	5.79483792	76	6.57295012
27	7.08022193	77	8.19321505	27	5.83980786	77	6.57668838
28	7.14219520	78	8.19877825	28	5.88190401	78	6.58027242
29	7.20046424	79	8.20411394	29	5.92136659	79	6.58370898
30	7.25530930	80	8.20923195	30	5.95846777	80	6.58700451
31	7.30698495	81	8.21414161	31	5.99324994	81	6.59016513
32	7.35572176	82	8.21885187	32	6.02596263	82	6.59319667
33	7.40172910	83	8.22337104	33	6.05680435	83	6.59610469
34	7.44519749	84	8.22777104	34	6.08588011	84	6.59889448
35	7.48630068	85	8.23186919	35	6.11331684	85	6.60157110
36	7.52519748	86	8.23586294	36	6.13922995	86	6.60413934
37	7.56203332	87	8.23969605	37	6.16372459	87	6.60660382
38	7.59694158	88	8.24337524	38	6.18689678	88	6.60896892
39	7.63004492	89	8.24690693	39	6.20883436	89	6.61123880
40	7.66145623	90	8.25029727	40	6.22961789	90	6.61341747
41	7.69127963	91	8.25355211	41	6.24926130	91	6.61550873
42	7.71961132	92	8.25667708	42	6.26801267	92	6.61751624
43	7.74654027	93	8.25967752	43	6.28575471	93	6.61944347
44	7.77214892	94	8.26255855	44	6.30260531	94	6.62129373
45	7.79651375	95	8.26532509	45	6.31861799	95	6.62307023
46	7.81970581	96	8.26798181	46	6.33384231	96	6.62477599
47	7.84179120	97	8.27053322	47	6.34832421	97	6.62641392
48	7.86283148	98	8.27298359	48	6.36210637	98	6.62798681
49	7.88288405	99	8.27533704	49	6.37522845	99	6.62949730
50	7.90200250	100	8.27759751	50	6.38772737	100	6.63094796



Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at 4 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	16 per cent.	Years	16 per cent.	Years	18 per cent.	Years	18 per cent.
1	0.86206897	51	6.01471742	1	0.84512714	51	5.36887241
2	1.53799759	52	6.02474519	2	1.49210064	52	5.37686085
3	2.08182167	53	6.03430581	3	1.99860681	53	5.38447449
4	2.52850865	54	6.04324233	4	2.40679653	54	5.39173364
5	2.90168425	55	6.05212419	5	2.74252781	55	5.39865730
6	3.21789766	56	6.06042733	6	3.02332280	56	5.40526323
7	3.48906651	57	6.06835430	7	3.26147635	57	5.41156806
8	3.72400876	58	6.07592443	8	3.46587015	58	5.41758740
9	3.92938127	59	6.08315584	9	3.64308025	59	5.42333589
10	4.11030506	60	6.09006555	10	3.79807974	60	5.42882727
11	4.27078413	61	6.09666960	11	3.93469911	61	5.43407447
12	4.41399430	62	6.10298309	12	4.05593668	62	5.43908964
13	4.54248660	63	6.10902023	13	4.16417289	63	5.44388424
14	4.65833504	64	6.11479442	14	4.26132175	64	5.44846906
15	4.76324073	65	6.12031834	15	4.34893979	65	5.45285426
16	4.85861434	66	6.12560392	16	4.42830575	66	5.45704945
17	4.94563457	67	6.13066244	17	4.50047998	67	5.46106368
18	5.02529411	68	6.13550460	18	4.56634916	68	5.46490554
19	5.09843502	69	6.14051752	19	4.62666046	69	5.46888219
20	5.16577621	70	6.14457966	20	4.68204797	70	5.47210407
21	5.22793522	71	6.14883119	21	4.73305330	71	5.47547568
22	5.28544547	72	6.15290365	22	4.78014189	72	5.47870479
23	5.33877014	73	6.15680518	23	4.82371593	73	5.48179794
24	5.38831335	74	6.16054351	24	4.86412478	74	5.48476129
25	5.43442929	75	6.16412596	25	4.90167334	75	5.48760072
26	5.47742974	76	6.16755951	26	4.93662898	76	5.49032178
27	5.51759114	77	6.17085076	27	4.96922779	77	5.49292976
28	5.55515512	78	6.17400600	28	4.99967564	78	5.49542969
29	5.59034195	79	6.17703122	29	5.02815935	79	5.49782633
30	5.62334501	80	6.17993210	30	5.05484254	80	5.50012422
31	5.65433834	81	6.18271406	31	5.07987204	81	5.50202192
32	5.68347835	82	6.18538225	32	5.10337942	82	5.50444084
33	5.71090595	83	6.18794158	33	5.12548293	83	5.50646759
34	5.73674848	84	6.19039673	34	5.14628915	84	5.50841166
35	5.76112125	85	6.19275216	35	5.16589437	85	5.51027661
36	5.78412897	86	6.19501211	36	5.18438584	86	5.51206582
37	5.80586695	87	6.19718065	37	5.20184280	87	5.51378252
38	5.82642206	88	6.19926164	38	5.21833735	88	5.51542980
39	5.84587375	89	6.20125877	39	5.23393525	89	5.51701057
40	5.86429473	90	6.20317557	40	5.24869665	90	5.51852765
41	5.88175174	91	6.20501540	41	5.26267660	91	5.51998372
42	5.89830610	92	6.20678147	42	5.27592562	92	5.52138132
43	5.91401428	93	6.20847685	43	5.28849016	93	5.52272291
44	5.92892836	94	6.21010448	44	5.30041298	94	5.52401079
45	5.94309643	95	6.21166715	45	5.31173354	95	5.52524722
46	5.95656300	96	6.21316756	46	5.32248827	96	5.52643431
47	5.96936930	97	6.21460826	47	5.33271089	97	5.52757410
48	5.98155357	98	6.21599170	48	5.34243263	98	5.52866854
49	5.99315136	99	6.21732023	49	5.35168250	99	5.52971949
50	6.00419572	100	6.21859609	50	5.36048741	100	5.53072873

TABLE IX.

Present Value of £1 per Annum in  $n$  years; Redemption of Capital being at 4 per cent. with interest allowed to a Purchaser at the following rates per cent.

Years	20 per cent.	Years	20 per cent.	Years	25 per cent.	Years	25 per cent.
1	0·83333333	51	4·84827682	1	0·80000000	51	3·90230426
2	1·44886364	52	4·85479022	2	1·35099338	52	3·90652279
3	1·92178881	53	4·86099628	3	1·75331386	53	3·91054021
4	2·29626374	54	4·86691180	4	2·05977447	54	3·91436769
5	2·59992072	55	4·87255248	5	2·30082286	55	3·91801564
6	2·85093675	56	4·87793299	6	2·49524716	56	3·92149379
7	3·06175925	57	4·88306706	7	2·65526946	57	3·92481124
8	3·24119867	58	4·88796757	8	2·78918374	58	3·92797649
9	3·39566653	59	4·89264657	9	2·90281666	59	3·93099750
10	3·52993987	60	4·89711540	10	3·00038155	60	3·93388175
11	3·64765094	61	4·90138468	11	3·08500066	61	3·93663625
12	3·75161076	62	4·90546443	12	3·15903692	62	3·93926758
13	3·84402887	63	4·90936405	13	3·22431154	63	3·94178193
14	3·92666601	64	4·91309242	14	3·28225086	64	3·94418512
15	4·00094262	65	4·91665788	15	3·33398790	65	3·94648263
16	4·06801726	66	4·92006832	16	3·38043406	66	3·94867964
17	4·12884435	67	4·92333118	17	3·42233079	67	3·95078101
18	4·18421722	68	4·92645348	18	3·46028750	68	3·95279135
19	4·23480076	69	4·92968485	19	3·49480963	69	3·95487139
20	4·28115638	70	4·93230261	20	3·52632001	70	3·95655603
21	4·32376143	71	4·93504167	21	3·55517500	71	3·95831836
22	4·36302438	72	4·93766465	22	3·58167714	72	3·96000566
23	4·39929677	73	4·94017691	23	3·60608489	73	3·96162138
24	4·43288287	74	4·94258348	24	3·62862041	74	3·96316884
25	4·46404731	75	4·94488917	25	3·64947570	75	3·96465113
26	4·49302138	76	4·94709852	26	3·66881759	76	3·96607126
27	4·52000873	77	4·94921586	27	3·68679211	77	3·96743199
28	4·54518648	78	4·95124528	28	3·70352573	78	3·96873601
29	4·56871482	79	4·95319068	29	3·71913212	79	3·96998584
30	4·59073381	80	4·95505000	30	3·73371930	80	3·97118389
31	4·61136877	81	4·95684408	31	3·74734848	81	3·97233245
32	4·63073179	82	4·95858590	32	3·76012522	82	3·97343369
33	4·64892338	83	4·96020358	33	3·77211070	83	3·97448968
34	4·66603395	84	4·96178101	34	3·78333678	84	3·97550240
35	4·68214504	85	4·96329414	35	3·79395310	85	3·97647371
36	4·69733038	86	4·96474572	36	3·80391752	86	3·97740540
37	4·71165684	87	4·96613838	37	3·81330711	87	3·97829917
38	4·72518514	88	4·96747464	38	3·82216361	88	3·97915665
39	4·73797062	89	4·96875688	39	3·83052490	89	3·97997939
40	4·75006377	90	4·96998739	40	3·83842548	90	3·98076884
41	4·76151077	91	4·97116835	41	3·84589681	91	3·98152644
42	4·77235393	92	4·97230183	42	3·85296766	92	3·98225351
43	4·78263210	93	4·97338983	43	3·85966437	93	3·98295134
44	4·79238101	94	4·97443423	44	3·86601110	94	3·98362115
45	4·80163357	95	4·97543685	45	3·87203009	95	3·98426412
46	4·81042017	96	4·97639942	46	3·87774180	96	3·98488136
47	4·81876886	97	4·97732360	47	3·88316511	97	3·98547393
48	4·82670564	98	4·97821098	48	3·88831738	98	3·98604286
49	4·83425458	99	4·97906305	49	3·89321497	99	3·98658912
50	4·84143805	100	4·97988128	50	3·89787261	100	3·98711365



**TABLE X.**  
**FOR**  
**VALUING MINERAL AND OTHER PROPERTIES.**



Present Value (or Years' Purchase) of £1 per Annum in  $n$  years, after  $t$  years' Deference. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 4 per cent.

$n$ Years	Deferred 1 Year	$n$ Years	Deferred 1 Year	$n$ Years	Deferred 2 Years	$n$ Years	Deferred 2 Years
1	924555	51	19'811710	1	888996	51	19'049726
2	1'805329	52	19'941812	2	1'735894	52	19'174824
3	2'645001	53	20'067701	3	2'543270	53	19'295871
4	3'446039	54	20'189527	4	3'313500	54	19'413011
5	4'210724	55	20'307432	5	4'048774	55	19'526381
6	4'941163	56	20'421552	6	4'751119	56	19'636112
7	5'639309	57	20'532021	7	5'422414	57	19'742333
8	6'306971	58	20'638964	8	6'064397	58	19'845163
9	6'945829	59	20'742504	9	6'678684	59	19'944720
10	7'557448	60	20'842756	10	7'266779	60	20'041117
11	8'143283	61	20'939834	11	7'830081	61	20'134461
12	8'704688	62	21'033841	12	8'369895	62	20'224852
13	9'242932	63	21'124894	13	8'887437	63	20'312403
14	9'759197	64	21'213079	14	9'383846	64	20'397197
15	10'254592	65	21'298497	15	9'860187	65	20'479330
16	10'730152	66	21'381243	16	10'317456	66	20'558892
17	11'186849	67	21'461403	17	10'756589	67	20'635970
18	11'625597	68	21'539064	18	11'178462	68	20'710643
19	12'047253	69	21'614309	19	11'583900	69	20'782994
20	12'452622	70	21'687217	20	11'973678	70	20'853098
21	12'842463	71	21'757865	21	12'348525	71	20'921029
22	13'217491	72	21'826327	22	12'709129	72	20'986858
23	13'578379	73	21'892675	23	13'056137	73	21'050654
24	13'925764	74	21'956978	24	13'390161	74	21'112484
25	14'260246	75	22'019300	25	13'711778	75	21'172409
26	14'582392	76	22'079708	26	14'021534	76	21'230493
27	14'892740	77	22'138261	27	14'319946	77	21'286795
28	15'191798	78	22'195022	28	14'607501	78	21'341373
29	15'480046	79	22'250045	29	14'884664	79	21'394279
30	15'757942	80	22'303388	30	15'151872	80	21'445571
31	16'025919	81	22'355104	31	15'409542	81	21'495297
32	16'284387	82	22'405243	32	15'658069	82	21'543508
33	16'533736	83	22'453857	33	15'897827	83	21'590253
34	16'774338	84	22'500995	34	16'129175	84	21'635577
35	17'006545	85	22'546702	35	16'352451	85	21'679535
36	17'230692	86	22'591023	36	16'567977	86	21'722143
37	17'447099	87	22'634002	37	16'776061	87	21'763469
38	17'656071	88	22'675680	38	16'976996	88	21'803544
39	17'857898	89	22'716101	39	17'171060	89	21'842410
40	18'052856	90	22'755302	40	17'358519	90	21'880103
41	18'241208	91	22'793320	41	17'539627	91	21'916659
42	18'423208	92	22'830194	42	17'714627	92	21'952115
43	18'599094	93	22'865957	43	17'883749	93	21'986503
44	18'769098	94	22'900647	44	18'047214	94	22'019858
45	18'933438	95	22'934294	45	18'205233	95	22'052211
46	19'042326	96	22'966931	46	18'358011	96	22'083593
47	19'245962	97	22'998591	47	18'505737	97	22'114035
48	19'394538	98	23'029302	48	18'648599	98	22'143566
49	19'538238	99	23'059094	49	18'786772	99	22'172211
50	19'677239	100	23'087995	50	18'920426	100	22'200000

Present Value (or Years' Purchase) of £1 per Annum in  $n$  years, after  $t$  years' Deference. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 4 per cent.

$n$ Years	Deferred 3 Years	$n$ Years	Deferred 3 Years	$n$ Years	Deferred 4 Years	$n$ Years	Deferred 4 Years
1	854803	51	18317041	1	821927	51	17612542
2	1669128	52	18437327	2	1604931	52	17728202
3	2445452	53	18553719	3	2351397	53	17840118
4	3186057	54	18666354	4	3063517	54	17948420
5	3893051	55	18775363	5	3743319	55	18053237
6	4568383	56	18880874	6	4392677	56	18154690
7	5213858	57	18983009	7	5013326	57	18252897
8	5831150	58	19081884	8	5606876	58	18347969
9	6421810	59	19177612	9	6174819	59	18440015
10	6987286	60	19270301	10	6718546	60	18529139
11	7528923	61	19360055	11	7239350	61	18615441
12	8047974	62	19446970	12	7738438	62	18699013
13	8545611	63	19531153	13	8216935	63	18779958
14	9022927	64	19612686	14	8675893	64	18858355
15	9480948	65	19691660	15	9116297	65	18934292
16	9920629	66	19768162	16	9590688	66	19007852
17	10342872	67	19842275	17	9945071	67	19079114
18	10748519	68	19914077	18	10335116	68	19148154
19	11138363	69	19983645	19	10709967	69	19215047
20	11513150	70	20051052	20	11070338	70	19279861
21	11873580	71	20116370	21	11416906	71	19342667
22	12220314	72	20179668	22	11750304	72	19403530
23	12553976	73	20241010	23	12071133	73	19462513
24	12875152	74	20300462	24	12379956	74	19519678
25	13184400	75	20358082	25	126777310	75	19575083
26	13482242	76	20413932	26	12963697	76	19628785
27	13769176	77	20468069	27	13239595	77	19680839
28	14045672	78	20520547	28	13505456	78	19731299
29	14312174	79	20571419	29	13761708	79	19780214
30	14569105	80	20620738	30	14008757	80	19827636
31	14816864	81	20668552	31	14246987	81	19873611
32	15055833	82	20714908	32	14476765	82	19918185
33	15286370	83	20759855	33	14698435	83	19961403
34	15508820	84	20803436	34	14912329	84	20003308
35	15723508	85	20845695	35	15118760	85	20043941
36	15930744	86	20886672	36	15318026	86	20083342
37	16130825	87	20926408	37	15510412	87	20121550
38	16324032	88	20964943	38	15696187	88	20158603
39	16510632	89	21002314	39	15875611	89	20194536
40	16690881	90	21038557	40	16048927	90	20229385
41	16865023	91	21073707	41	16216371	91	20263184
42	17033292	92	21107799	42	16378169	92	20295964
43	17195909	93	21140865	43	16534531	93	20327758
44	17353177	94	21172937	44	16685664	94	20358597
45	17505029	95	21204045	45	16831762	95	20388509
46	17651930	96	21234221	46	16973013	96	20417524
47	17793975	97	21263492	47	17109594	97	20445669
48	17931342	98	21291886	48	17241678	98	20472971
49	18064200	99	21319430	49	17369427	99	20499456
50	18192715	100	21346151	50	17492998	100	20525148

Present Value (or Years' Purchase) of £1 per Annum in  $n$  years, after  $t$  years' Deference. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 5 per cent.

$n$ Years	Deferred 1 Year	$n$ Years	Deferred 1 Year	$n$ Years	Deferred 2 Years	$n$ Years	Deferred 2 Years
1	907030	51	16270609	1	863837	51	15495810
2	1755182	52	16359105	2	1671601	52	15580091
3	2549675	53	16444546	3	2428261	53	15661463
4	3295128	54	16527051	4	3138215	54	15740040
5	3995648	55	16606738	5	3805377	55	15815932
6	4654900	56	16683714	6	4433236	56	15889242
7	5276163	57	167578083	7	5024914	57	15960070
8	5862379	58	16829945	8	5583215	58	16028509
9	6416197	59	16899393	9	6110661	59	16094651
10	6940009	60	16966521	10	6609528	60	16158582
11	7435978	61	17031412	11	7081879	61	16220383
12	7906064	62	17094149	12	7529581	62	16280133
13	8352055	63	17154819	13	7954333	63	16337913
14	8775575	64	17213488	14	8357685	64	16393788
15	9178109	65	17270232	15	8741051	65	16447831
16	9561017	66	17325122	16	9105725	66	16500106
17	9925543	67	17378223	17	9452893	67	16550679
18	10272834	68	17429600	18	9783646	68	16599609
19	10603940	69	17479313	19	10098984	69	16646955
20	10919834	70	17527423	20	10399836	70	16692774
21	11221410	71	17573984	21	10687051	71	16737118
22	11509499	72	17619051	22	10961421	72	16780039
23	11784865	73	17662677	23	11223675	73	16821587
24	12048224	74	17704911	24	11474493	74	16861811
25	12300235	75	17745801	25	11714503	75	16900753
26	12541512	76	17785393	26	11944290	76	16938460
27	12772629	77	17823732	27	12164402	77	16974973
28	12994119	78	17860860	28	12375344	78	17010333
29	13206481	79	17896818	29	12577593	79	17044579
30	13410180	80	17931646	30	12771592	80	17077748
31	13605651	81	17965381	31	12957756	81	17109877
32	13793304	82	17998060	32	13136473	82	17141000
33	13973521	83	18029719	33	13308107	83	17171151
34	14146661	84	18060391	34	13473002	84	17200363
35	14313062	85	18090109	35	13631479	85	17228666
36	14473041	86	18118904	36	13783840	86	17256089
37	14626897	87	18146807	37	13930370	87	17282663
38	14774911	88	18173847	38	14071336	88	17308415
39	14917348	89	18200051	39	14206990	89	17333372
40	15054461	90	18225449	40	14337573	90	17357560
41	15186484	91	18250064	41	14463309	91	17381003
42	15313642	92	18273922	42	14584412	92	17403725
43	15436146	93	18297049	43	14701082	93	17425751
44	15554195	94	18319468	44	14813511	94	17447102
45	15667982	95	18341200	45	14921879	95	17467799
46	15777684	96	18362269	46	15026357	96	17487866
47	15883471	97	18382695	47	15127107	97	17507319
48	15985508	98	18402499	48	15224285	98	17526179
49	16083947	99	18421701	49	15318036	99	17544467
50	16178935	100	18440319	50	15408501	100	17562198



Present Value (or Years' Purchase) of £1 per Annum in  $n$  years, after  $t$  years' Deference. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 5 per cent.

$n$ Years	Deferred 3 Years	$n$ Years	Deferred 3 Years	$n$ Years	Deferred 4 Years	$n$ Years	Deferred 4 Years
1	·822703	51	14·757928	1	·783526	51	14·055155
2	1·592002	52	14·838196	2	1·516191	52	14·131601
3	2·312632	53	14·915694	3	2·202504	53	14·205408
4	2·988779	54	14·990529	4	2·846453	54	14·276679
5	3·624172	55	15·062807	5	3·451589	55	14·345516
6	4·222133	56	15·132627	6	4·021075	56	14·412011
7	4·785637	57	15·200081	7	4·557745	57	14·476253
8	5·317353	58	15·265262	8	5·064141	58	14·538330
9	5·819683	59	15·328254	9	5·542549	59	14·598322
10	6·294795	60	15·389141	10	5·995037	60	14·656309
11	6·744654	61	15·447999	11	6·423473	61	14·712365
12	7·171036	62	15·504904	12	6·829551	62	14·766560
13	7·575563	63	15·559933	13	7·214814	63	14·818968
14	7·959708	64	15·613147	14	7·580667	64	14·869648
15	8·324819	65	15·664616	15	7·928391	65	14·918667
16	8·672128	66	15·714403	16	8·259160	66	14·966082
17	9·002764	67	15·762567	17	8·574052	67	15·011953
18	9·317767	68	15·809167	18	8·874055	68	15·056334
19	9·618090	69	15·854259	19	9·160076	69	15·099279
20	9·904615	70	15·897896	20	9·432957	70	15·140837
21	10·178154	71	15·940128	21	9·693470	71	15·181058
22	10·439459	72	15·981006	22	9·942331	72	15·219989
23	10·689225	73	16·020575	23	10·180203	73	15·257675
24	10·928099	74	16·058883	24	10·407703	74	15·294159
25	11·156680	75	16·095971	25	10·625399	75	15·329480
26	11·375526	76	16·131883	26	10·833823	76	15·363682
27	11·585156	77	16·166657	27	11·033470	77	15·396800
28	11·786054	78	16·200333	28	11·224801	78	15·428873
29	11·978672	79	16·232948	29	11·408247	79	15·459935
30	12·163433	80	16·264538	30	11·584210	80	15·490020
31	12·340732	81	16·295137	31	11·753066	81	15·519162
32	12·510939	82	16·324778	32	11·915168	82	15·547391
33	12·674400	83	16·353493	33	12·070845	83	15·574739
34	12·831444	84	16·381314	34	12·220410	84	15·601235
35	12·982374	85	16·408269	35	12·364153	85	15·626907
36	13·127480	86	16·434387	36	12·502349	86	15·651780
37	13·267032	87	16·459695	37	12·635256	87	15·675884
38	13·401286	88	16·484221	38	12·763116	88	15·699242
39	13·530480	89	16·507990	39	12·886158	89	15·721879
40	13·654845	90	16·531026	40	13·004601	90	15·743818
41	13·774594	91	16·553353	41	13·118647	91	15·765081
42	13·889930	92	16·574993	42	13·228491	92	15·785691
43	14·001045	93	16·595970	43	13·334315	93	15·805669
44	14·108119	94	16·616304	44	13·436290	94	15·825035
45	14·211327	95	16·636016	45	13·534583	95	15·843808
46	14·310830	96	16·655127	46	13·629348	96	15·862009
47	14·406783	97	16·673653	47	13·720731	97	15·879653
48	14·499333	98	16·691616	48	13·808875	98	15·896761
49	14·588621	99	16·709033	49	13·893910	99	15·913348
50	14·674777	100	16·725920	50	13·975964	100	15·929431

Present Value (or Years' Purchase) of £1 per Annum in  $n$  years, after  $t$  years' Deference. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 6 per cent.

$n$ Years	Deferred 1 Year	$n$ Years	Deferred 1 Year	$n$ Years	Deferred 2 Years	$n$ Years	Deferred 2 Years
1	·889996	51	13·765407	1	·839619	51	12·986230
2	1·707162	52	13·829301	2	1·610530	52	13·046507
3	2·459768	53	13·990894	3	2·320536	53	13·104613
4	3·154685	54	13·950283	4	2·976306	54	13·160641
5	3·798585	55	14·007558	5	3·583570	55	13·214674
6	4·396119	56	14·062807	6	4·147281	56	13·266796
7	4·952045	57	14·116114	7	4·671739	57	13·317085
8	5·470345	58	14·167555	8	5·160701	58	13·365615
9	5·954510	59	14·217208	9	5·617461	59	13·412457
10	6·407613	60	14·265141	10	6·044916	60	13·457677
11	6·733368	61	14·311425	11	6·445629	61	13·501341
12	7·231189	62	14·356119	12	6·821875	62	13·543505
13	7·606220	63	14·399295	13	7·175677	63	13·584237
14	7·959378	64	14·441001	14	7·508846	64	13·623583
15	8·292383	65	14·481299	15	7·823001	65	13·661600
16	8·606775	66	14·520241	16	8·119597	66	13·698337
17	8·903950	67	14·557878	17	8·399950	67	13·733843
18	9·185162	68	14·594258	18	8·665245	68	13·768164
19	9·451552	69	14·629430	19	8·916556	69	13·801345
20	9·704152	70	14·663436	20	9·154858	70	13·833427
21	9·943906	71	14·696321	21	9·381041	71	13·864450
22	10·171671	72	14·728126	22	9·595914	72	13·894455
23	10·388233	73	14·758888	23	9·800218	73	13·923476
24	10·594311	74	14·788646	24	9·994630	74	13·951550
25	10·790563	75	14·817436	25	10·179774	75	13·978710
26	10·977598	76	14·845293	26	10·356222	76	14·004990
27	11·155937	77	14·872249	27	10·524500	77	14·030420
28	11·326202	78	14·898337	28	10·685094	78	14·055031
29	11·488763	79	14·923586	29	10·838453	79	14·078851
30	11·644095	80	14·948026	30	10·984993	80	14·101907
31	11·792608	81	14·971685	31	11·125099	81	14·124228
32	11·934679	82	14·994590	32	11·259128	82	14·145836
33	12·070660	83	15·016767	33	11·387412	83	14·166758
34	12·200880	84	15·038242	34	11·510261	84	14·187017
35	12·325643	85	15·059037	35	11·627962	85	14·206635
36	12·445235	86	15·079176	36	11·740785	86	14·225634
37	12·559920	87	15·098680	37	11·848978	87	14·244034
38	12·669949	88	15·117574	38	11·952779	88	14·261858
39	12·775553	89	15·135874	39	12·052405	89	14·279123
40	12·881951	90	15·153602	40	12·148064	90	14·295847
41	12·974347	91	15·170777	41	12·239947	91	14·312051
42	13·067934	92	15·187418	42	12·328236	92	14·327749
43	13·157892	93	15·203541	43	12·413103	93	14·342959
44	13·244392	94	15·219164	44	12·494706	94	14·357698
45	13·327593	95	15·234303	45	12·573198	95	14·371980
46	13·407646	96	15·248975	46	12·648719	96	14·385821
47	13·484694	97	15·263193	47	12·721406	97	14·399235
48	13·558870	98	15·276974	48	12·791384	98	14·412236
49	13·630302	99	15·290330	49	12·858773	99	14·424836
50	13·699110	100	15·303277	50	12·923685	100	14·437050

Present Value (or Years' Purchase) of £1 per Annum in  $n$  years, after  $t$  years' Deference. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 6 per cent.

$n$ Years	Deferred 3 Years	$n$ Years	Deferred 3 Years	$n$ Years	Deferred 4 Years	$n$ Years	Deferred 4 Years
1	792093	51	12'251162	1	747258	51	11'557709
2	1'519368	52	12'308028	2	1'433367	52	11'611356
3	2'189185	53	12'362845	3	2'065270	53	11'663070
4	2'807836	54	12'415701	4	2'648904	54	11'712934
5	3'380734	55	12'466676	5	3'189367	55	11'761024
6	3'912530	56	12'515847	6	3'691069	56	11'807412
7	4'407302	57	12'563290	7	4'157835	57	11'852169
8	4'868587	58	12'609072	8	4'593010	58	11'895360
9	5'299492	59	12'653263	9	4'999525	59	11'937040
10	5'702752	60	12'695923	10	5'379959	60	11'977295
11	6'080783	61	12'737116	11	5'736592	61	12'016156
12	6'435732	62	12'776894	12	6'071450	62	12'053683
13	6'769508	63	12'815320	13	6'386333	63	12'089933
14	7'083818	64	12'852438	14	6'682852	64	12'124951
15	7'380191	65	12'888304	15	6'962449	65	12'158786
16	7'659999	66	12'922961	16	7'226419	66	12'191482
17	7'924483	67	12'956458	17	7'475933	67	12'223083
18	8'174761	68	12'988836	18	7'712044	68	12'253628
19	8'411846	69	13'020139	19	7'935710	69	12'283159
20	8'636660	70	13'050405	20	8'147799	70	12'311712
21	8'850040	71	13'079672	21	8'349101	71	12'339323
22	9'052750	72	13'107978	22	8'540337	72	12'366027
23	9'245490	73	13'135356	23	8'722167	73	12'391855
24	9'428898	74	13'161841	24	8'895193	74	12'416841
25	9'603562	75	13'187464	25	9'059971	75	12'441013
26	9'770022	76	13'212256	26	9'217009	76	12'464402
27	9'928775	77	13'236248	27	9'366776	77	12'487036
28	10'080278	78	13'259466	28	9'509704	78	12'508939
29	10'224957	79	13'281937	29	9'646194	79	12'530139
30	10'363202	80	13'303688	30	9'776613	80	12'550659
31	10'495378	81	13'324745	31	9'901307	81	12'570524
32	10'621821	82	13'345130	32	10'020593	82	12'589755
33	10'742844	83	13'364868	33	10'134766	83	12'608376
34	10'858739	84	13'383980	34	10'244101	84	12'626406
35	10'969778	85	13'402488	35	10'348855	85	12'643866
36	11'076214	86	13'420411	36	10'449266	86	12'660775
37	11'178283	87	13'437770	37	10'545558	87	12'677152
38	11'276208	88	13'454585	38	10'637940	88	12'693015
39	11'370195	89	13'470872	39	10'726607	89	12'708380
40	11'460439	90	13'486651	40	10'811743	90	12'723265
41	11'547121	91	13'501937	41	10'893519	91	12'737686
42	11'630413	92	13'516747	42	10'972096	92	12'751868
43	11'710476	93	13'531096	43	11'047627	93	12'765194
44	11'787461	94	13'545001	44	11'120254	94	12'778312
45	11'861509	95	13'558474	45	11'190112	95	12'791023
46	11'932756	96	13'571532	46	11'257325	96	12'803342
47	12'001328	97	13'584186	47	11'322017	97	12'815279
48	12'067345	98	13'596451	48	11'384297	98	12'826850
49	12'130919	99	13'608338	49	11'444272	99	12'838065
50	12'192158	100	13'619860	50	11'502044	100	12'848935

Present Value (or Years' Purchase) of £1 per Annum in  $n$  years, after  $t$  years' Deference. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 8 per cent.

$n$ Years	Deferred 1 Year	$n$ Years	Deferred 1 Year	$n$ Years	Deferred 2 Years	$n$ Years	Deferred 2 Years
1	·857339	51	10·458443	1	·793832	51	9·683745
2	1·617025	52	10·495982	2	1·497246	52	9·718503
3	2·294563	53	10·532094	3	2·124596	53	9·751940
4	2·902343	54	10·566844	4	2·687355	54	9·784116
5	3·450383	55	10·600296	5	3·194799	55	9·815090
6	3·946871	56	10·632504	6	3·654510	56	9·844912
7	4·398565	57	10·663524	7	4·072746	57	9·873635
8	4·811095	58	10·693406	8	4·454718	58	9·901304
9	5·189184	59	10·722205	9	4·804800	59	9·927969
10	5·536825	60	10·749962	10	5·126690	60	9·953670
11	5·857420	61	10·776721	11	5·423538	61	9·978447
12	6·153883	62	10·802524	12	5·698040	62	10·002338
13	6·428723	63	10·827414	13	5·952522	63	10·025384
14	6·684115	64	10·851424	14	6·188996	64	10·047616
15	6·921953	65	10·874593	15	6·409217	65	10·069068
16	7·143892	66	10·896952	16	6·614716	66	10·089771
17	7·351389	67	10·918536	17	6·806842	67	10·109757
18	7·545725	68	10·939374	18	6·986783	68	10·129051
19	7·728036	69	10·959497	19	7·155590	69	10·147684
20	7·899334	70	10·978931	20	7·314199	70	10·165679
21	8·060518	71	10·997705	21	7·463444	71	10·183061
22	8·212394	72	11·015841	22	7·604070	72	10·199854
23	8·355684	73	11·033367	23	7·736745	73	10·216082
24	8·491040	74	11·050303	24	7·862076	74	10·231763
25	8·619048	75	11·066673	25	7·980601	75	10·246921
26	8·740240	76	11·082498	26	8·092815	76	10·261574
27	8·855095	77	11·097798	27	8·199163	77	10·275740
28	8·964053	78	11·112592	28	8·300050	78	10·289438
29	9·067512	79	11·126898	29	8·395845	79	10·302685
30	9·165836	80	11·140736	30	8·486886	80	10·315498
31	9·259359	81	11·154120	31	8·573482	81	10·327891
32	9·348386	82	11·167069	32	8·655914	82	10·339880
33	9·433197	83	11·179597	33	8·734443	83	10·351480
34	9·514050	84	11·191719	34	8·809307	84	10·362705
35	9·591183	85	11·203450	35	8·880726	85	10·373566
36	9·664816	86	11·214804	36	8·948904	86	10·384079
37	9·735151	87	11·225793	37	9·014030	87	10·394254
38	9·802377	88	11·236430	38	9·076276	88	10·404103
39	9·866667	89	11·246728	39	9·135804	89	10·413638
40	9·928183	90	11·256698	40	9·192763	90	10·422870
41	9·987078	91	11·266352	41	9·247295	91	10·431809
42	10·043489	92	11·275700	42	9·299528	92	10·440464
43	10·097547	93	11·284752	43	9·349582	93	10·448846
44	10·149376	94	11·293519	44	9·397571	94	10·456964
45	10·199088	95	11·302011	45	9·443601	95	10·464826
46	10·246791	96	11·310236	46	9·487770	96	10·472442
47	10·292583	97	11·318205	47	9·530171	97	10·479820
48	10·336560	98	11·325923	48	9·570890	98	10·486967
49	10·378807	99	11·333401	49	9·610008	99	10·493811
50	10·419410	100	11·340647	50	9·647603	100	10·500601

Present Value (or Years' Purchase) of £1 per Annum in  $n$  years, after  $t$  years' Deference. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 8 per cent.

$n$ Years	Deferred 3 Years	Years $n$	Deferred 3 Years	$n$ Years	Deferred 4 Years	$n$ Years	Deferred 4 Years
1	735030	51	8966426	1	680583	51	8302251
2	1386338	52	8998610	2	1283647	52	8332050
3	1967217	53	9029570	3	1821498	53	8360717
4	2488290	54	9059362	4	2303974	54	8388303
5	2958146	55	9088042	5	2739025	55	8414858
6	3383804	56	9115655	6	3133154	56	8440425
7	3771059	57	9142250	7	3491723	57	8465050
8	4124737	58	9167869	8	3819203	58	8488772
9	4448887	59	9192559	9	4119342	59	8511633
10	4746933	60	9216356	10	4395310	60	8533667
11	5021792	61	9239298	11	4649809	61	8554910
12	5275961	62	9261420	12	4885151	62	8575393
13	5511591	63	9282759	13	5103328	63	8595151
14	5730549	64	9303343	14	5306067	64	8614211
15	5934457	65	9323207	15	5494870	65	8632603
16	6124734	66	9342376	16	5671053	66	8650353
17	6302628	67	9360881	17	5835770	67	8667487
18	6469240	68	9378746	18	5990040	68	8684029
19	6625543	69	9395999	19	6134765	69	8700003
20	6772403	70	9412661	20	6270747	70	8715431
21	6910593	71	9428755	21	6398700	71	8730334
22	7040802	72	9444304	22	6519264	72	8744731
23	7163650	73	9459330	23	6633012	73	8758643
24	7279696	74	9473850	24	6740463	74	8772088
25	7389442	75	9487885	25	6842079	75	8785083
26	7493344	76	9501452	26	6938285	76	8797645
27	7591814	77	9514569	27	7029461	77	8809791
28	7685227	78	9527253	28	7115955	78	8821535
29	7773927	79	9539518	29	7198084	79	8832892
30	7858224	80	9551382	30	7276137	80	8843877
31	7938405	81	9562857	31	7350379	81	8854501
32	8014731	82	9573958	32	7421051	82	8864781
33	8087443	83	9584699	33	7488377	83	8874726
34	8156761	84	9595092	34	7552560	84	8884349
35	8222891	85	9605149	35	7613791	85	8893661
36	8286018	86	9614883	36	7672243	86	8902674
37	8346319	87	9624304	37	7728077	87	8911397
38	8403955	88	9633424	38	7781444	88	8919841
39	8459073	89	9642253	39	7832479	89	8928016
40	8511814	90	9650801	40	7881313	90	8935931
41	8562306	91	9659077	41	7928065	91	8943594
42	8610670	92	9667092	42	7972846	92	8951015
43	8657016	93	9674852	43	8015760	93	8958201
44	8701451	94	9682369	44	8056903	94	8965161
45	8744071	95	9689649	45	8096366	95	8971902
46	8784968	96	9696701	46	8134234	96	8978431
47	8824228	97	9703532	47	8170585	97	8984757
48	8861931	98	9710150	48	8205496	98	8990884
49	8898151	99	9716561	49	8239033	99	8996820
50	8932961	100	9722773	50	8271265	100	9002572

Present Value (or Years' Purchase) of £1 per Annum in  $n$  years, after  $t$  years' Deference. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 10 per cent.

$n$ Years	Deferred 1 Year	$n$ Years	Deferred 1 Year	$n$ Years	Deferred 2 Years	$n$ Years	Deferred 2 Years
1	826446	51	8376107	1	751315	51	7614643
2	1534044	52	8400615	2	1394585	52	7636923
3	2146460	53	8424161	3	1951327	53	7658329
4	2681470	54	8446792	4	2437700	54	7678902
5	3152684	55	8468549	5	2866077	55	7698681
6	3570698	56	8489475	6	3246090	56	7717693
7	3943887	57	8509606	7	3585351	57	7736005
8	4278953	58	8528979	8	3889957	58	7753617
9	4581330	59	8547628	9	4164845	59	7770571
10	4855464	60	8565585	10	4414058	60	7786896
11	5105031	61	8582881	11	4640937	61	7802619
12	5333097	62	8599543	12	4848270	62	7817767
13	5542239	63	8615602	13	5038399	63	7832365
14	5734636	64	8631079	14	5213306	64	7846436
15	5912149	65	8646002	15	5374681	65	7860002
16	6076370	66	8660392	16	5523973	66	7873084
17	6228675	67	8674273	17	5662432	67	7885702
18	6370256	68	8687664	18	5791142	68	7897876
19	6502151	69	8700585	19	5911046	69	7909623
20	6625268	70	8713056	20	6022971	70	7920960
21	6740409	71	8725095	21	6127644	71	7931905
22	6848277	72	8736719	22	6225706	72	7942471
23	6949498	73	8747943	23	6317725	73	7952675
24	7044627	74	8758784	24	6404206	74	7962531
25	7134161	75	8769256	25	6485601	75	7972051
26	7218542	76	8779374	26	6562311	76	7981249
27	7298171	77	8789150	27	6634701	77	7990137
28	7373405	78	8798599	28	6703095	78	7998726
29	7444567	79	8807731	29	6767789	79	8007029
30	7511952	80	8816560	30	6829048	80	8015055
31	7575825	81	8825096	31	6887114	81	8022815
32	7636428	82	8833350	32	6942207	82	8030318
33	7693981	83	8841332	33	6994528	83	8037575
34	7748685	84	8849053	34	7044259	84	8044593
35	7800724	85	8856521	35	7091568	85	8051383
36	7850269	86	8863746	36	7136608	86	8057951
37	7897473	87	8870736	37	7179521	87	8064306
38	7942479	88	8877500	38	7220435	88	8070455
39	7985421	89	8884046	39	7259474	89	8076405
40	8026415	90	8890381	40	7296471	90	8082165
41	8065580	91	8896513	41	7332345	91	8087739
42	8103016	92	8902449	42	7366378	92	8093136
43	8138821	93	8908196	43	7398928	93	8098360
44	8173084	94	8913759	44	7430097	94	8103418
45	8205889	95	8919146	45	7459900	95	8108315
46	8237314	96	8924363	46	7488468	96	8113057
47	8267431	97	8929415	47	7515846	97	8117650
48	8296307	98	8934308	48	7542098	98	8122098
49	8324007	99	8939047	49	7567279	99	8126406
50	8350588	100	8943637	50	7591444	100	8130579

Present Value (or Years' Purchase) of £1 per Annum in  $n$  years, after  $t$  years' Deferrance. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 10 per cent.

$n$ Years	Deferred 3 Years	$n$ Years	Deferred 3 Years	$n$ Years	Deferred 4 Years	$n$ Years	Deferred 4 Years
1	·683013	51	6·922402	1	·620921	51	6·293093
2	1·267805	52	6·942657	2	1·152550	52	6·311507
3	1·773934	53	6·962117	3	1·612667	53	6·329197
4	2·216091	54	6·980820	4	2·014628	54	6·346200
5	2·605524	55	6·998801	5	2·368658	55	6·362547
6	2·950990	56	7·016095	6	2·682719	56	6·378268
7	3·259410	57	7·032732	7	2·963100	57	6·393393
8	3·536325	58	7·048743	8	3·214841	58	6·407948
9	3·786223	59	7·064155	9	3·442021	59	6·421959
10	4·012780	60	7·078996	10	3·647982	60	6·435451
11	4·219034	61	7·093290	11	3·835485	61	6·448446
12	4·407519	62	7·107061	12	4·006835	62	6·460964
13	4·580363	63	7·120332	13	4·163966	63	6·473029
14	4·739369	64	7·133124	14	4·308517	64	6·484658
15	4·886073	65	7·145456	15	4·441885	65	6·495869
16	5·021794	66	7·157349	16	4·565267	66	6·506681
17	5·147666	67	7·168820	17	4·679696	67	6·517109
18	5·264674	68	7·179887	18	4·786068	68	6·527170
19	5·373678	69	7·190566	19	4·885162	69	6·536879
20	5·475429	70	7·200873	20	4·977662	70	6·546248
21	5·570586	71	7·210823	21	5·064169	71	6·555293
22	5·659733	72	7·220429	22	5·145212	72	6·564026
23	5·743386	73	7·229705	23	5·221260	73	6·572459
24	5·822006	74	7·238664	24	5·292733	74	6·580604
25	5·896001	75	7·247319	25	5·360001	75	6·588472
26	5·965738	76	7·255681	26	5·423398	76	6·596073
27	6·031546	77	7·263761	27	5·483224	77	6·603419
28	6·093723	78	7·271569	28	5·539748	78	6·610518
29	6·152535	79	7·279117	29	5·593214	79	6·617379
30	6·208225	80	7·286413	30	5·643841	80	6·624012
31	6·261013	81	7·293468	31	5·691830	81	6·630425
32	6·311097	82	7·300289	32	5·737361	82	6·636627
33	6·358662	83	7·306886	33	5·780602	83	6·642624
34	6·403872	84	7·313267	34	5·821702	84	6·648424
35	6·446880	85	7·319439	35	5·860800	85	6·654035
36	6·487825	86	7·325410	36	5·898023	86	6·659463
37	6·526837	87	7·331187	37	5·933488	87	6·664715
38	6·564032	88	7·336777	38	5·967302	88	6·669797
39	6·599522	89	7·342187	39	5·999565	89	6·674715
40	6·633401	90	7·347422	40	6·030365	90	6·679475
41	6·665768	91	7·352490	41	6·059789	91	6·684082
42	6·696707	92	7·357596	42	6·087916	92	6·688542
43	6·726298	93	7·362145	43	6·114817	93	6·692859
44	6·754615	94	7·366743	44	6·140559	94	6·697039
45	6·781727	95	7·371196	45	6·165206	95	6·701087
46	6·807608	96	7·375507	46	6·188816	96	6·705006
47	6·832588	97	7·379682	47	6·211443	97	6·708802
48	6·856452	98	7·383726	48	6·233139	98	6·712478
49	6·879344	99	7·387642	49	6·253950	99	6·716038
50	6·901313	100	7·391436	50	6·273920	100	6·719487

Present Value (or Years' Purchase) of £1 per Annum in  $n$  years, after  $t$  years' Deference. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 12 per cent.

$n$ Years	Deferred 1 Year	$n$ Years	Deferred 1 Year	$n$ Years	Deferred 2 Years	$n$ Years	Deferred 2 Years
1	797194	51	6946476	1	711780	51	6202211
2	1457462	52	6963631	2	1301306	52	6217528
3	2013069	53	6980098	3	1797383	53	6232230
4	2486880	54	6995910	4	2220428	54	6246349
5	2895553	55	7011101	5	2585316	55	6259911
6	3251512	56	7025698	6	2903136	56	6272945
7	3564210	57	7039731	7	3182330	57	6285474
8	3840966	58	7053226	8	3429434	58	6297523
9	4087540	59	7066207	9	3649589	59	6309113
10	4308522	60	7078698	10	3846894	60	6320266
11	4507616	61	7090721	11	4024657	61	6331001
12	4687847	62	7102297	12	4185578	62	6341337
13	4851705	63	7113446	13	4331880	63	6351291
14	5001263	64	7124186	14	4465413	64	6360880
15	5138256	65	7134535	15	4587728	65	6370120
16	5264151	66	7144509	16	4700135	66	6379026
17	5380196	67	7154125	17	4803746	67	6387611
18	5487458	68	7163397	18	4899516	68	6395890
19	5586856	69	7172340	19	4988264	69	6403875
20	5679185	70	7180967	20	5070701	70	6411577
21	5765138	71	7189291	21	5147445	71	6419009
22	5845318	72	7197324	22	5219034	72	6426182
23	5923829	73	7205078	23	5289133	73	6433106
24	5990423	74	7212564	24	5348592	74	6439790
25	6056230	75	7219793	25	5407349	75	6446244
26	6118046	76	7226775	26	5462541	76	6452478
27	6176198	77	7233519	27	5514462	77	6458499
28	6230979	78	7240034	28	5563374	78	6464316
29	6282653	79	7246323	29	5609511	79	6469932
30	6331455	80	7252412	30	5653085	80	6475368
31	6377600	81	7258292	31	5694286	81	6480618
32	6421279	82	7263976	32	5733285	82	6485693
33	6462668	83	7269471	33	5770239	83	6490600
34	6501925	84	7274785	34	5805290	84	6495344
35	6539196	85	7279923	35	5838568	85	6499932
36	6574611	86	7284893	36	5870189	86	6504369
37	6608293	87	7289700	37	5900261	87	6508661
38	6640350	88	7294350	38	5928884	88	6512813
39	6670886	89	7298849	39	5956149	89	6516830
40	6699994	90	7303203	40	5982138	90	6520717
41	6727759	91	7307416	41	6006928	91	6524478
42	6754262	92	7311493	42	6030591	92	6528118
43	6779574	93	7315439	43	6053191	93	6531642
44	6803766	94	7319259	44	6074791	94	6535052
45	6826899	95	7322957	45	6095445	95	6538354
46	6849032	96	7326537	46	6115207	96	6541551
47	6870219	97	7330003	47	6134124	97	6544646
48	6890512	98	7333360	48	6152242	98	6547643
49	6909956	99	7336610	49	6169604	99	6550545
50	6928597	100	7339758	50	6186248	100	6553356



Present Value (or Years' Purchase) of £1 per Annum in  $n$  years, after  $t$  years' Deference. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 12 per cent.

$n$ Years	Deferred 3 Years	$n$ Years	Deferred 3 Years	$n$ Years	Deferred 4 Years	$n$ Years	Deferred 4 Years
1	·635518	51	5·537688	1	·567427	51	4·944365
2	1·161880	52	5·551364	2	1·037393	52	4·956575
3	1·604806	53	5·564491	3	1·432863	53	4·968296
4	1·982525	54	5·577097	4	1·770112	54	4·979551
5	2·308317	55	5·589206	5	2·060998	55	4·990363
6	2·592086	56	5·600844	6	2·314362	56	5·000753
7	2·841366	57	5·612031	7	2·536934	57	5·010742
8	3·061995	58	5·622788	8	2·733924	58	5·020347
9	3·258562	59	5·633137	9	2·909430	59	5·029587
10	3·434727	60	5·643095	10	3·066721	60	5·038478
11	3·593444	61	5·652680	11	3·208432	61	5·047035
12	3·737123	62	5·661908	12	3·336717	62	5·055275
13	3·867750	63	5·670796	13	3·453348	63	5·063210
14	3·986976	64	5·679357	14	3·559800	64	5·070855
15	4·096186	65	5·687607	15	3·657309	65	5·078221
16	4·196549	66	5·695559	16	3·746919	66	5·085320
17	4·289059	67	5·703224	17	3·829517	67	5·092165
18	4·374568	68	5·710616	18	3·905864	68	5·098764
19	4·453807	69	5·717745	19	3·976614	69	5·105130
20	4·527412	70	5·724623	20	4·042332	70	5·111270
21	4·595933	71	5·731258	21	4·103511	71	5·117195
22	4·659852	72	5·737663	22	4·160582	72	5·122913
23	4·722440	73	5·743844	23	4·216464	73	5·128432
24	4·775529	74	5·749812	24	4·263865	74	5·133761
25	4·827990	75	5·755575	25	4·310705	75	5·138906
26	4·877269	76	5·761141	26	4·354704	76	5·143876
27	4·923627	77	5·766517	27	4·396096	77	5·148676
28	4·967298	78	5·771711	28	4·435088	78	5·153313
29	5·008492	79	5·776725	29	4·471868	79	5·157790
30	5·047397	80	5·781579	30	4·506605	80	5·162124
31	5·084184	81	5·786266	31	4·539450	81	5·166309
32	5·119004	82	5·790797	32	4·570540	82	5·170355
33	5·151999	83	5·795178	33	4·599999	83	5·174266
34	5·183295	84	5·799414	34	4·627942	84	5·178048
35	5·213007	85	5·803510	35	4·654470	85	5·181706
36	5·241240	86	5·807472	36	4·679678	86	5·185243
37	5·268090	87	5·811304	37	4·703652	87	5·188664
38	5·293647	88	5·815011	38	4·726470	88	5·191974
39	5·317990	89	5·818598	39	4·748205	89	5·195177
40	5·341194	90	5·822069	40	4·768923	90	5·198275
41	5·363329	91	5·825427	41	4·788686	91	5·201274
42	5·384456	92	5·828677	42	4·807550	92	5·204176
43	5·404635	93	5·831823	43	4·825567	93	5·206985
44	5·423920	94	5·834868	44	4·842786	94	5·209704
45	5·442362	95	5·837816	45	4·859252	95	5·212336
46	5·460006	96	5·840670	46	4·875005	96	5·214884
47	5·476897	97	5·843434	47	4·890086	97	5·217352
48	5·493074	98	5·846110	48	4·904530	98	5·219741
49	5·508575	99	5·848701	49	4·918370	99	5·222054
50	5·523436	100	5·851211	50	4·931639	100	5·224295

Present Value (or Years' Purchase) of £1 per Annum in  $n$  years, after  $t$  years' Deference. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 15 per cent.

$n$ Years	Deferred 1 Year	$n$ Years	Deferred 1 Year	$n$ Years	Deferred 2 Years	$n$ Years	Deferred 2 Years
1	756144	51	5'485046	1	657516	51	4'769605
2	1'353176	52	5'496023	2	1'176674	52	4'779150
3	1'836345	53	5'506550	3	1'596822	53	4'788304
4	2'235231	54	5'516651	4	1'943679	54	4'797087
5	2'569982	55	5'526345	5	2'234767	55	4'805517
6	2'854801	56	5'535654	6	2'482436	56	4'813612
7	3'099984	57	5'544596	7	2'695638	57	4'821387
8	3'313180	58	5'553188	8	2'881026	58	4'828859
9	3'500188	59	5'561448	9	3'043642	59	4'836041
10	3'665487	60	5'569390	10	3'187380	60	4'842947
11	3'812588	61	5'577029	11	3'315293	61	4'849590
12	3'944285	62	5'584380	12	3'429813	62	4'855982
13	4'062828	63	5'591455	13	3'532894	63	4'862134
14	4'170050	64	5'598266	14	3'626130	64	4'868057
15	4'267458	65	5'604826	15	3'710833	65	4'873761
16	4'356303	66	5'611145	16	3'788089	66	4'879256
17	4'437632	67	5'617233	17	3'858810	67	4'884550
18	4'512330	68	5'623101	18	3'923765	68	4'889653
19	4'581147	69	5'628758	19	3'983606	69	4'894572
20	4'644724	70	5'634212	20	4'038890	70	4'899315
21	4'703613	71	5'639473	21	4'090098	71	4'903889
22	4'758291	72	5'644547	22	4'137644	72	4'908301
23	4'809173	73	5'649443	23	4'181889	73	4'912559
24	4'856620	74	5'654168	24	4'223148	74	4'916667
25	4'900951	75	5'658729	25	4'261696	75	4'920633
26	4'942445	76	5'663131	26	4'297778	76	4'924462
27	4'981349	77	5'667383	27	4'331608	77	4'928158
28	5'017884	78	5'671488	28	4'363377	78	4'931729
29	5'052244	79	5'675454	29	4'393255	79	4'935177
30	5'084605	80	5'679285	30	4'421395	80	4'938509
31	5'115122	81	5'682987	31	4'447932	81	4'941728
32	5'143938	82	5'686564	32	4'472989	82	4'944838
33	5'171178	83	5'690022	33	4'496676	83	4'947845
34	5'196959	84	5'693364	34	4'519094	84	4'950751
35	5'221382	85	5'696595	35	4'540332	85	4'953560
36	5'244544	86	5'699719	36	4'560473	86	4'956277
37	5'266530	87	5'702740	37	4'579591	87	4'958904
38	5'287418	88	5'705662	38	4'597755	88	4'961445
39	5'307281	89	5'708488	39	4'615026	89	4'963902
40	5'326183	90	5'711222	40	4'631463	90	4'966280
41	5'344186	91	5'713867	41	4'647117	91	4'968580
42	5'361344	92	5'716426	42	4'662038	92	4'970805
43	5'377708	93	5'718903	43	4'676268	93	4'972959
44	5'393327	94	5'721300	44	4'689849	94	4'975043
45	5'408243	95	5'723619	45	4'702820	95	4'977060
46	5'422497	96	5'725865	46	4'715214	96	4'979012
47	5'436125	97	5'728039	47	4'727065	97	4'980903
48	5'449163	98	5'730143	48	4'738402	98	4'982733
49	5'461643	99	5'732181	49	4'749254	99	4'984505
50	5'473595	100	5'734154	50	4'759647	100	4'986220

Present Value (or Years' Purchase) of £1 per Annum in  $n$  years, after  $t$  years' Deference. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 15 per cent.

$n$ Years	Deferred 3 Years	$n$ Years	Deferred 3 Years	$n$ Years	Deferred 4 Years	$n$ Years	Deferred 4 Years
1	571753	51	4147482	1	497177	51	3606506
2	1023195	52	4155783	2	889735	52	3613724
3	1388541	53	4163743	3	1207427	53	3620646
4	1690156	54	4171380	4	1469701	54	3627287
5	1943276	55	4178711	5	1689805	55	3633661
6	2158640	56	4185749	6	1877078	56	3639782
7	2344033	57	4192511	7	2038290	57	3645661
8	2505240	58	4199008	8	2178470	58	3651311
9	2646645	59	4205253	9	2301430	59	3656742
10	2771634	60	4211258	10	2410117	60	3661964
11	2882864	61	4217035	11	2506838	61	3666987
12	2982446	62	4222593	12	2593431	62	3671820
13	3072082	63	4227943	13	2671375	63	3676472
14	3153157	64	4233093	14	2741875	64	3680951
15	3226811	65	4238053	15	2805923	65	3685264
16	3293990	66	4242831	16	2864340	66	3689419
17	3355487	67	4247435	17	2917815	67	3693422
18	3411970	68	4251872	18	2966930	68	3697280
19	3464005	69	4256149	19	3012178	69	3700999
20	3512078	70	4260273	20	3053981	70	3704586
21	3556607	71	4264251	21	3092702	71	3708044
22	3597951	72	4268088	22	3128653	72	3711380
23	3636425	73	4271790	23	3162109	73	3714600
24	3672302	74	4275363	24	3193306	74	3717707
25	3705823	75	4278811	25	3222455	75	3720706
26	3737198	76	4282141	26	3249737	76	3723601
27	3766615	77	4285355	27	3275318	77	3726396
28	3794241	78	4288460	28	3299340	78	3729095
29	3820222	79	4291458	29	3321932	79	3731703
30	3844691	80	4294355	30	3343210	80	3734222
31	3867767	81	4297154	31	3363276	81	3736656
32	3889556	82	4299859	32	3382222	82	3739008
33	3910153	83	4302474	33	3400133	83	3741281
34	3929647	84	4305001	34	3417084	84	3743479
35	3948115	85	4307444	35	3433143	85	3745603
36	3965628	86	4309806	36	3448373	86	3747657
37	3982253	87	4312090	37	3462829	87	3749644
38	3998047	88	4314300	38	3476563	88	3751565
39	4013066	89	4316437	39	3489623	89	3753423
40	4027359	90	4318504	40	3502051	90	3755221
41	4040972	91	4320504	41	3513888	91	3756960
42	4053946	92	4322439	42	3525170	92	3758643
43	4066320	93	4324312	43	3535930	93	3760271
44	4078130	94	4326124	44	3546200	94	3761847
45	4089408	95	4327878	45	3556007	95	3763372
46	4100186	96	4329576	46	3565379	96	3764849
47	4110491	97	4331220	47	3574340	97	3766278
48	4120350	98	4332811	48	3582913	98	3767662
49	4129786	99	4334352	49	3591119	99	3769002
50	4138823	100	4335844	50	3598977	100	3770299

TABLE X.

Present Value (or Years' Purchase) of £1 per Annum in  $n$  years, after  $t$  years' Deference. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 18 per cent.

$n$ Years	Deferred 1 Year	$n$ Years	Deferred 1 Year	$n$ Years	Deferred 2 Years	$n$ Years	Deferred 2 Years
1	718184	51	4'494990	1	608631	51	3'809313
2	1'259952	52	4'502552	2	1'067756	52	3'815722
3	1'683032	53	4'509799	3	1'426298	53	3'821864
4	2'022441	54	4'516749	4	1'713933	54	3'827753
5	2'300657	55	4'523415	5	1'949710	55	3'833403
6	2'532767	56	4'529813	6	2'146413	56	3'838824
7	2'729276	57	4'535955	7	2'312946	57	3'844030
8	2'897723	58	4'541854	8	2'455698	58	3'849029
9	3'043659	59	4'547522	9	2'579372	59	3'853832
10	3'171261	60	4'552969	10	2'687509	60	3'858448
11	3'283734	61	4'558207	11	2'782825	61	3'862887
12	3'383577	62	4'563244	12	2'867438	62	3'867156
13	3'472777	63	4'568091	13	2'943022	63	3'871263
14	3'552889	64	4'572755	14	3'010923	64	3'875216
15	3'625230	65	4'577244	15	3'072229	65	3'879021
16	3'690843	66	4'581568	16	3'127833	66	3'882685
17	3'750600	67	4'585732	17	3'178475	67	3'886214
18	3'805229	68	4'589744	18	3'224770	68	3'889614
19	3'855342	69	4'593610	19	3'267239	69	3'892890
20	3'901456	70	4'597337	20	3'306319	70	3'896048
21	3'944016	71	4'600930	21	3'342386	71	3'899094
22	3'983398	72	4'604396	22	3'375761	72	3'902030
23	4'019932	73	4'607738	23	3'406722	73	3'904863
24	4'053901	74	4'610963	24	3'435510	74	3'907595
25	4'085553	75	4'614074	25	3'462333	75	3'910232
26	4'115105	76	4'617078	26	3'487377	76	3'912778
27	4'142746	77	4'619977	27	3'510802	77	3'915235
28	4'168647	78	4'622776	28	3'532751	78	3'917607
29	4'192955	79	4'625479	29	3'553351	79	3'919898
30	4'215803	80	4'628090	30	3'572715	80	3'922110
31	4'237311	81	4'630612	31	3'590941	81	3'924247
32	4'257584	82	4'633049	32	3'608122	82	3'926313
33	4'276717	83	4'635403	33	3'624336	83	3'928308
34	4'294796	84	4'637679	34	3'639658	84	3'930237
35	4'311899	85	4'639879	35	3'654152	85	3'932101
36	4'328096	86	4'642005	36	3'667878	86	3'933903
37	4'343450	87	4'644061	37	3'680890	87	3'935645
38	4'358020	88	4'646049	38	3'693237	88	3'937330
39	4'371857	89	4'647972	39	3'704964	89	3'938959
40	4'385011	90	4'649831	40	3'716111	90	3'940535
41	4'397525	91	4'651630	41	3'726716	91	3'942060
42	4'409440	92	4'653371	42	3'736813	92	3'943534
43	4'420793	93	4'655054	43	3'746435	93	3'944961
44	4'431618	94	4'656684	44	3'755608	94	3'946342
45	4'441947	95	4'658260	45	3'764362	95	3'947678
46	4'451809	96	4'659786	46	3'772719	96	3'948972
47	4'461231	97	4'661264	47	3'780704	97	3'950223
48	4'470237	98	4'662694	48	3'788337	98	3'951435
49	4'478852	99	4'664078	49	3'795367	99	3'952608
50	4'487096	100	4'665418	50	3'802624	100	3'953744

Present Value (or Years' Purchase) of £1 per Annum in  $n$  years, after years' Deference. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 18 per cent.

$n$ Years	Deferred 3 Years	$n$ Years	Deferred 3 Years	$n$ Years	Deferred 4 Years	$n$ Years	Deferred 4 Years
1	·515789	51	3·228232	1	·437109	51	2·735790
2	·904878	52	3·233663	2	·766846	52	2·740392
3	1·208727	53	3·238868	3	1·024345	53	2·744803
4	1·452486	54	3·243859	4	1·230920	54	2·749033
5	1·652296	55	3·248646	5	1·400251	55	2·753090
6	1·818994	56	3·253241	6	1·541520	56	2·756984
7	1·961024	57	3·257652	7	1·661122	57	2·760722
8	2·081100	58	3·261889	8	1·763644	58	2·764313
9	2·185908	59	3·265959	9	1·852465	59	2·767762
10	2·277550	60	3·269872	10	1·930127	60	2·771078
11	2·358326	61	3·273633	11	1·998582	61	2·774265
12	2·430032	62	3·277251	12	2·059349	62	2·777331
13	2·494087	63	3·280731	13	2·113633	63	2·780281
14	2·551630	64	3·284081	14	2·162398	64	2·783120
15	2·603584	65	3·287306	15	2·206427	65	2·785852
16	2·650706	66	3·290411	16	2·246361	66	2·788484
17	2·693623	67	3·293401	17	2·282731	67	2·791018
18	2·732856	68	3·296283	18	2·315980	68	2·793460
19	2·768846	69	3·299059	19	2·346480	69	2·795813
20	2·801965	70	3·301736	20	2·374547	70	2·798081
21	2·832531	71	3·304317	21	2·400450	71	2·800268
22	2·860815	72	3·306805	22	2·424419	72	2·802377
23	2·887053	73	3·309206	23	2·446655	73	2·804412
24	2·911449	74	3·311522	24	2·467330	74	2·806374
25	2·934181	75	3·313756	25	2·486594	75	2·808268
26	2·955404	76	3·315913	26	2·504580	76	2·810096
27	2·975256	77	3·317995	27	2·521403	77	2·811861
28	2·993857	78	3·320006	28	2·537167	78	2·813564
29	3·011315	79	3·321947	29	2·552092	79	2·815209
30	3·027724	80	3·323822	30	2·565868	80	2·816798
31	3·043171	81	3·325633	31	2·578958	81	2·818333
32	3·057730	82	3·327383	32	2·591297	82	2·819817
33	3·071471	83	3·329075	33	2·602942	83	2·821250
34	3·084456	84	3·330709	34	2·613946	84	2·822635
35	3·096739	85	3·332289	35	2·624355	85	2·823973
36	3·108371	86	3·333816	36	2·634213	86	2·825268
37	3·119398	87	3·335292	37	2·643558	87	2·826519
38	3·129862	88	3·336720	38	2·652425	88	2·827729
39	3·139800	89	3·338101	39	2·660847	89	2·828899
40	3·149247	90	3·339437	40	2·668853	90	2·830031
41	3·158234	91	3·340728	41	2·676469	91	2·831126
42	3·166791	92	3·341978	42	2·683721	92	2·832185
43	3·174945	93	3·343188	43	2·690631	93	2·833210
44	3·182719	94	3·344358	44	2·697220	94	2·834201
45	3·190137	95	3·345490	45	2·703506	95	2·835161
46	3·197220	96	3·346586	46	2·709508	96	2·836090
47	3·203986	97	3·347647	47	2·715243	97	2·836989
48	3·210455	98	3·348674	48	2·720724	98	2·837859
49	3·216642	99	3·349668	49	2·725968	99	2·838702
50	3·222563	100	3·350631	50	2·730985	100	2·839517

Present Value (or Years' Purchase) of £1 per Annum in  $n$  years, after  $t$  years' Deference. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 20 per cent.

$n$ Years	Deferred 1 Year	$n$ Years	Deferred 1 Year	$n$ Years	Deferred 2 Years	$n$ Years	Deferred 2 Years
1	·694444	51	3·996154	1	·578704	51	3·330129
2	1·203177	52	4·002231	2	1·002647	52	3·335193
3	1·591757	53	4·008054	3	1·326465	53	3·340045
4	1·898137	54	4·013635	4	1·581781	54	3·344696
5	2·145805	55	4·018988	5	1·788171	55	3·349156
6	2·350082	56	4·024123	6	1·958402	56	3·353436
7	2·521384	57	4·029052	7	2·101153	57	3·357543
8	2·667039	58	4·033784	8	2·222532	58	3·361487
9	2·792355	59	4·038330	9	2·326963	59	3·365275
10	2·901270	60	4·042698	10	2·417725	60	3·368915
11	2·996767	61	4·046897	11	2·497306	61	3·372414
12	3·081147	62	4·050934	12	2·567622	62	3·375779
13	3·156212	63	4·054818	13	2·630177	63	3·379015
14	3·223398	64	4·058555	14	2·686165	64	3·382129
15	3·283858	65	4·062151	15	2·736548	65	3·385126
16	3·338530	66	4·065614	16	2·782108	66	3·388011
17	3·388188	67	4·068948	17	2·823490	67	3·390790
18	3·433471	68	4·072160	18	2·861226	68	3·393467
19	3·474917	69	4·075255	19	2·895764	69	3·396046
20	3·512977	70	4·078238	20	2·927481	70	3·398531
21	3·548035	71	4·081113	21	2·956696	71	3·400927
22	3·580420	72	4·083885	22	2·983683	72	3·403238
23	3·610412	73	4·086559	23	3·008677	73	3·405366
24	3·638257	74	4·089138	24	3·031881	74	3·407615
25	3·664165	75	4·091627	25	3·053471	75	3·409689
26	3·688323	76	4·094028	26	3·073602	76	3·411690
27	3·710891	77	4·096347	27	3·092409	77	3·413622
28	3·732013	78	4·098584	28	3·110011	78	3·415487
29	3·751816	79	4·100745	29	3·126513	79	3·417288
30	3·770410	80	4·102832	30	3·142009	80	3·419026
31	3·787897	81	4·104847	31	3·156581	81	3·420706
32	3·804365	82	4·106795	32	3·170304	82	3·422329
33	3·819894	83	4·108676	33	3·183245	83	3·423897
34	3·834556	84	4·110494	34	3·195464	84	3·425412
35	3·848416	85	4·112251	35	3·207014	85	3·426876
36	3·861532	86	4·113950	36	3·217944	86	3·428291
37	3·873958	87	4·115592	37	3·228298	87	3·429660
38	3·885740	88	4·117180	38	3·238117	88	3·430983
39	3·896924	89	4·118715	39	3·247437	89	3·432262
40	3·907550	90	4·120200	40	3·256291	90	3·433500
41	3·917653	91	4·121636	41	3·264711	91	3·434697
42	3·927267	92	4·123026	42	3·272722	92	3·435855
43	3·936423	93	4·124370	43	3·280353	93	3·436975
44	3·945150	94	4·125670	44	3·287625	94	3·438059
45	3·953472	95	4·126929	45	3·294560	95	3·439108
46	3·961415	96	4·128147	46	3·301179	96	3·440123
47	3·969000	97	4·129326	47	3·307500	97	3·441105
48	3·976249	98	4·130467	48	3·313540	98	3·442056
49	3·983179	99	4·131572	49	3·319316	99	3·442976
50	3·989809	100	4·132641	50	3·324840	100	3·443868

Present Value (or Years' Purchase) of £1 per Annum in  $n$  years, after  $t$  years' Deference. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at 20 per cent.

$n$ Years	Deferred 3 Years	$n$ Years	Deferred 3 Years	$n$ Years	Deferred 4 Years	$n$ Years	Deferred 4 Years
1	.482253	51	2.775107	1	.401878	51	2.312589
2	.835539	52	2.779327	2	.696283	52	2.316106
3	1.105387	53	2.783371	3	.921156	53	2.319476
4	1.318150	54	2.787247	4	1.098459	54	2.322706
5	1.490143	55	2.790964	5	1.241786	55	2.325803
6	1.632002	56	2.794530	6	1.360001	56	2.328775
7	1.750961	57	2.797952	7	1.459134	57	2.331627
8	1.852110	58	2.801239	8	1.543425	58	2.334366
9	1.939136	59	2.804396	9	1.615946	59	2.336997
10	2.014771	60	2.807429	10	1.678976	60	2.339524
11	2.081088	61	2.810345	11	1.734240	61	2.341954
12	2.139685	62	2.813149	12	1.783071	62	2.344291
13	2.191814	63	2.815846	13	1.826512	63	2.346538
14	2.238471	64	2.818441	14	1.865392	64	2.348701
15	2.280457	65	2.820938	15	1.900381	65	2.350782
16	2.318424	66	2.823343	16	1.932020	66	2.352786
17	2.352908	67	2.825658	17	1.960757	67	2.354715
18	2.384355	68	2.827889	18	1.986963	68	2.356574
19	2.413137	69	2.830038	19	2.010947	69	2.358365
20	2.439567	70	2.832110	20	2.032973	70	2.360091
21	2.463913	71	2.834106	21	2.053261	71	2.361755
22	2.486402	72	2.836032	22	2.072002	72	2.363360
23	2.507231	73	2.837888	23	2.089359	73	2.364907
24	2.526567	74	2.839679	24	2.105473	74	2.366400
25	2.544559	75	2.841408	25	2.120466	75	2.367840
26	2.561335	76	2.843075	26	2.134446	76	2.369229
27	2.577008	77	2.844685	27	2.147506	77	2.370571
28	2.591676	78	2.846239	28	2.159730	78	2.371866
29	2.605428	79	2.847740	29	2.171190	79	2.373116
30	2.618341	80	2.849189	30	2.181951	80	2.374324
31	2.630484	81	2.850588	31	2.192070	81	2.375490
32	2.641920	82	2.851941	32	2.201600	82	2.376617
33	2.652704	83	2.853247	33	2.210587	83	2.377706
34	2.662886	84	2.854510	34	2.219072	84	2.378758
35	2.672511	85	2.855730	35	2.227093	85	2.379775
36	2.681620	86	2.856910	36	2.234683	86	2.380758
37	2.690248	87	2.858050	37	2.241874	87	2.381708
38	2.698431	88	2.859152	38	2.248692	88	2.382627
39	2.706198	89	2.860219	39	2.255165	89	2.383516
40	2.713576	90	2.861250	40	2.261313	90	2.384375
41	2.720592	91	2.862247	41	2.267160	91	2.385206
42	2.727269	92	2.863212	42	2.272724	92	2.386010
43	2.733627	93	2.864146	43	2.278023	93	2.386788
44	2.739687	94	2.865049	44	2.283073	94	2.387541
45	2.745467	95	2.865923	45	2.287889	95	2.388269
46	2.750983	96	2.866769	46	2.292486	96	2.388974
47	2.756250	97	2.867587	47	2.296875	97	2.389656
48	2.761284	98	2.868380	48	2.301070	98	2.390317
49	2.766096	99	2.869147	49	2.305080	99	2.390956
50	2.770702	100	2.869890	50	2.308917	100	2.391575

**TABLE XI.**  
**FOR**  
**VALUING MINERAL AND OTHER PROPERTIES.**





Present Value (or Years' Purchase) of £1 per Annum in  $n$  years, after  $t$  years' Deferrance. Redemption of Capital being at  $3\frac{1}{2}$  and 4 per cent., with Interest allowed to a Purchaser at 20 per cent.

## DEFERRED 2 YEAR.

$n$ Years	Redemption $3\frac{1}{2}$ per cent.	$n$ Years	Redemption $3\frac{1}{2}$ per cent.	$n$ Years	Redemption 4 per cent.	$n$ Years	Redemption 4 per cent.
1	694444	51	4019519	1	694444	51	4040229
2	1205283	52	4025291	2	1207386	52	4045657
3	1596625	53	4030807	3	1601490	53	4050828
4	1905846	54	4036080	4	1913553	54	4055758
5	2156206	55	4041123	5	2166600	55	4060458
6	2362939	56	4045948	6	2375780	56	4064943
7	2536440	57	4050717	7	2551465	57	4069221
8	2684045	58	4054988	8	2700998	58	4073305
9	2811080	59	4059224	9	2829721	59	4077204
10	2921502	60	4063283	10	2941615	60	4080928
11	3018318	61	4067172	11	3039708	61	4084486
12	3103848	62	4070901	12	3126341	62	4087885
13	3179914	63	4074478	13	3203356	63	4091135
14	3247967	64	4077908	14	3272220	64	4094242
15	3309175	65	4081199	15	3334118	65	4097213
16	3364491	66	4084358	16	3390013	66	4100055
17	3414697	67	4087392	17	3440702	67	4102774
18	3460445	68	4090304	18	3486846	68	4105376
19	3502279	69	4093101	19	3528999	69	4108069
20	3540659	70	4095788	20	3567629	70	4110251
21	3575976	71	4098370	21	3603133	71	4112533
22	3608565	72	4100852	22	3635852	72	4114719
23	3638711	73	4103237	23	3666079	73	4116813
24	3666665	74	4105530	24	3694068	74	4118818
25	3692642	75	4107736	25	3720038	75	4120739
26	3716830	76	4109857	26	3744183	76	4122581
27	3739396	77	4111897	27	3766673	77	4124345
28	3760485	78	4113859	28	3787653	78	4126036
29	3780226	79	4115565	29	3807261	79	4127658
30	3798734	80	4117565	30	3825610	80	4129207
31	3816111	81	4119315	31	3842806	81	4130702
32	3832448	82	4120998	32	3858942	82	4132131
33	3847828	83	4122620	33	3874101	83	4133502
34	3862322	84	4124181	34	3888360	84	4134816
35	3875999	85	4125684	35	3901786	85	4136077
36	3888917	86	4127132	36	3914440	86	4137287
37	3901131	87	4128527	37	3926379	87	4138447
38	3912691	88	4129870	38	3937653	88	4139561
39	3923641	89	4131164	39	3948308	89	4140629
40	3934023	90	4132411	40	3958385	90	4141654
41	3943873	91	4133613	41	3967924	91	4142638
42	3953226	92	4134771	42	3976960	92	4143583
43	3962115	93	4135887	43	3985525	93	4144490
44	3970567	94	4136963	44	3993649	94	4145360
45	3978609	95	4138000	45	4001360	95	4146196
46	3986267	96	4138999	46	4008682	96	4146998
47	3993562	97	4139963	47	4015639	97	4147768
48	4000516	98	4140893	48	4022253	98	4148508
49	4007149	99	4141788	49	4028543	99	4149218
50	4013478	100	4142653	50	4034530	100	4149899

Present Value (or Years' Purchase) of £1 per Annum in  $n$  years, after  $t$  years' Deferrance. Redemption of Capital being at  $3\frac{1}{2}$  and 4 per cent., with Interest allowed to a Purchaser at 20 per cent.

## DEFERRED 2 YEARS.

$n$ Years	Redemption $3\frac{1}{2}$ per cent.	$n$ Years	Redemption $3\frac{1}{2}$ per cent.	$n$ Years	Redemption 4 per cent.	$n$ Years	Redemption 4 per cent.
1	·578704	51	3'349599	1	·578703	51	3'366857
2	1'004403	52	3'354408	2	1'006155	52	3'371380
3	1'330521	53	3'359005	3	1'334575	53	3'375690
4	1'588205	54	3'363399	4	1'594627	54	3'379798
5	1'796838	55	3'367601	5	1'805500	55	3'383715
6	1'969116	56	3'371623	6	1'979816	56	3'387451
7	2'113700	57	3'375596	7	2'126220	57	3'391017
8	2'236704	58	3'379156	8	2'250831	58	3'394420
9	2'342566	59	3'382686	9	2'358101	59	3'397669
10	2'434585	60	3'386068	10	2'451346	60	3'400772
11	2'515265	61	3'389309	11	2'533089	61	3'403737
12	2'586540	62	3'392417	12	2'605284	62	3'406570
13	2'649929	63	3'395397	13	2'669463	63	3'409278
14	2'706639	64	3'398255	14	2'726850	64	3'411867
15	2'757646	65	3'400999	15	2'778431	65	3'414344
16	2'803742	66	3'403631	16	2'825010	66	3'416712
17	2'845581	67	3'406159	17	2'867251	67	3'418978
18	2'883704	68	3'408586	18	2'905704	68	3'421146
19	2'918566	69	3'410917	19	2'940832	69	3'423390
20	2'950549	70	3'413156	20	2'973023	70	3'425208
21	2'979980	71	3'415308	21	3'002610	71	3'427110
22	3'007137	72	3'417376	22	3'029876	72	3'428932
23	3'032259	73	3'419363	23	3'055065	73	3'430676
24	3'055554	74	3'421274	24	3'078389	74	3'432347
25	3'077201	75	3'423112	25	3'100031	75	3'433948
26	3'097358	76	3'424880	26	3'120151	76	3'435483
27	3'116163	77	3'426580	27	3'138893	77	3'436953
28	3'133737	78	3'428215	28	3'156377	78	3'438362
29	3'150188	79	3'429637	29	3'172717	79	3'439714
30	3'165612	80	3'431303	30	3'188008	80	3'441005
31	3'180093	81	3'432762	31	3'202338	81	3'442251
32	3'193707	82	3'434164	32	3'215784	82	3'443442
33	3'206523	83	3'435516	33	3'228417	83	3'444584
34	3'218602	84	3'436817	34	3'240299	84	3'445679
35	3'229999	85	3'438069	35	3'251488	85	3'446730
36	3'240764	86	3'439276	36	3'262033	86	3'447738
37	3'250943	87	3'440438	37	3'271982	87	3'448705
38	3'260576	88	3'441558	38	3'281376	88	3'449633
39	3'269701	89	3'442636	39	3'290256	89	3'450523
40	3'278352	90	3'443675	40	3'298653	90	3'451378
41	3'286561	91	3'444676	41	3'306603	91	3'452198
42	3'294355	92	3'445642	42	3'314133	92	3'452985
43	3'301762	93	3'446571	43	3'321270	93	3'453741
44	3'308806	94	3'447468	44	3'328040	94	3'454466
45	3'315508	95	3'448333	45	3'334466	95	3'455162
46	3'321889	96	3'449165	46	3'340567	96	3'455830
47	3'327968	97	3'449969	47	3'346365	97	3'456473
48	3'333763	98	3'450743	48	3'351877	98	3'457089
49	3'339291	99	3'451489	49	3'357119	99	3'457680
50	3'344565	100	3'452210	50	3'362108	100	3'458248

Present Value (or Years' Purchase) of £1 per Annum in  $n$  years, after  $t$  years' Deference. Redemption of Capital being at  $3\frac{1}{2}$  and 4 per cent., with Interest allowed to a Purchaser at 20 per cent.

## DEFERRED 3 YEARS.

$n$ Years	Redemption $3\frac{1}{2}$ per cent.	$n$ Years	Redemption $3\frac{1}{2}$ per cent.	$n$ Years	Redemption 4 per cent.	$n$ Years	Redemption 4 per cent.
1	482253	51	2'791335	1	482253	51	2'805717
2	837003	52	2'795343	2	838463	52	2'809486
3	1'108768	53	2'799174	3	1'112147	53	2'813078
4	1'323505	54	2'802836	4	1'328857	54	2'816501
5	1'497366	55	2'806338	5	1'504585	55	2'819765
6	1'640930	56	2'809689	6	1'649849	56	2'822879
7	1'761418	57	2'813000	7	1'771852	57	2'825850
8	1'863921	58	2'815967	8	1'875695	58	2'828687
9	1'952140	59	2'818908	9	1'965086	59	2'831394
10	2'028822	60	2'821727	10	2'042790	60	2'833980
11	2'096055	61	2'824427	11	2'110910	61	2'836451
12	2'155451	62	2'827017	12	2'171072	62	2'838812
13	2'208275	63	2'829501	13	2'224555	63	2'841069
14	2'255534	64	2'831883	14	2'272377	64	2'843226
15	2'298040	65	2'834169	15	2'315362	65	2'845290
16	2'336453	66	2'836363	16	2'354178	66	2'847263
17	2'371318	67	2'838469	17	2'389379	67	2'849151
18	2'403088	68	2'840492	18	2'421423	68	2'850958
19	2'432139	69	2'842434	19	2'450696	69	2'852828
20	2'458792	70	2'844300	20	2'477522	70	2'854343
21	2'483318	71	2'846093	21	2'502178	71	2'855929
22	2'505949	72	2'847816	22	2'524899	72	2'857446
23	2'526884	73	2'849473	23	2'545891	73	2'858900
24	2'546296	74	2'851065	24	2'565327	74	2'860293
25	2'564336	75	2'852597	25	2'583362	75	2'861627
26	2'581133	76	2'854070	26	2'600129	76	2'862906
27	2'596804	77	2'855486	27	2'615747	77	2'864131
28	2'611449	78	2'856849	28	2'630317	78	2'865305
29	2'625158	79	2'858034	29	2'643934	79	2'866431
30	2'638011	80	2'859423	30	2'656676	80	2'867507
31	2'650078	81	2'860638	31	2'668618	81	2'868545
32	2'661424	82	2'861807	32	2'679823	82	2'869538
33	2'672104	83	2'862933	33	2'690350	83	2'870490
34	2'682170	84	2'864017	34	2'700253	84	2'871403
35	2'691667	85	2'865061	35	2'709576	85	2'872278
36	2'700638	86	2'866066	36	2'718364	86	2'873118
37	2'709121	87	2'867035	37	2'726655	87	2'873924
38	2'717148	88	2'867968	38	2'734483	88	2'874698
39	2'724752	89	2'868867	39	2'741883	89	2'875440
40	2'731961	90	2'869732	40	2'748881	90	2'876151
41	2'738802	91	2'870567	41	2'755505	91	2'876835
42	2'745298	92	2'871371	42	2'761780	92	2'877491
43	2'751470	93	2'872146	43	2'767728	93	2'878121
44	2'757339	94	2'872893	44	2'773370	94	2'878725
45	2'762924	95	2'873614	45	2'778725	95	2'879305
46	2'768242	96	2'874308	46	2'783809	96	2'879862
47	2'773308	97	2'874977	47	2'788641	97	2'880397
48	2'778137	98	2'875622	48	2'793234	98	2'880911
49	2'782744	99	2'876245	49	2'797602	99	2'881404
50	2'787139	100	2'876845	50	2'801760	100	2'881877

Present Value (or Years' Purchase) of £1 per Annum in  $n$  years, after  $t$  years' Deference. Redemption of Capital being at  $3\frac{1}{2}$  and 4 per cent., with Interest allowed to a Purchaser at 20 per cent.

## DEFERRED 4 YEARS.

$n$ Years	Redemption $3\frac{1}{2}$ per cent.	$n$ Years	Redemption $3\frac{1}{2}$ per cent.	$n$ Years	Redemption 4 per cent.	$n$ Years	Redemption 4 per cent.
1	401877	51	2'326111	1	401877	51	2'338096
2	697502	52	2'329451	2	698719	52	2'341237
3	923973	53	2'332643	3	926789	53	2'344230
4	1'102920	54	2'335695	4	1'107380	54	2'347083
5	1'247804	55	2'338613	5	1'253820	55	2'349803
6	1'367441	56	2'341406	6	1'374873	56	2'352398
7	1'467847	57	2'344165	7	1'476542	57	2'354874
8	1'553267	58	2'346637	8	1'563078	58	2'357237
9	1'626782	59	2'349089	9	1'637571	59	2'359494
10	1'690684	60	2'351437	10	1'702324	60	2'361648
11	1'746712	61	2'353688	11	1'759091	61	2'363708
12	1'796208	62	2'355846	12	1'809226	62	2'365675
13	1'840228	63	2'357916	13	1'853795	63	2'367556
14	1'879610	64	2'359901	14	1'893646	64	2'369353
15	1'915032	65	2'361806	15	1'929467	65	2'371073
16	1'947043	66	2'363634	16	1'961813	66	2'372718
17	1'976097	67	2'365389	17	1'991147	67	2'374291
18	2'002572	68	2'367075	18	2'017851	68	2'375797
19	2'026781	69	2'368693	19	2'042245	69	2'377355
20	2'048992	70	2'370248	20	2'064600	70	2'378618
21	2'069431	71	2'371742	21	2'085147	71	2'379939
22	2'088290	72	2'373179	22	2'104081	72	2'381204
23	2'105736	73	2'374559	23	2'121574	73	2'382415
24	2'121912	74	2'375886	24	2'137771	74	2'383575
25	2'136945	75	2'377162	25	2'152800	75	2'384688
26	2'150943	76	2'378390	26	2'166773	76	2'385753
27	2'164002	77	2'379570	27	2'179788	77	2'386774
28	2'176206	78	2'380706	28	2'191930	78	2'387753
29	2'187630	79	2'381693	29	2'203277	79	2'388691
30	2'198341	80	2'382851	30	2'213895	80	2'389588
31	2'208397	81	2'383863	31	2'223847	81	2'390453
32	2'217852	82	2'384838	32	2'233184	82	2'391280
33	2'226752	83	2'385776	33	2'241957	83	2'392073
34	2'235140	84	2'386679	34	2'250209	84	2'392834
35	2'243055	85	2'387549	35	2'257978	85	2'393563
36	2'250530	86	2'388387	36	2'265301	86	2'394264
37	2'257599	87	2'389194	37	2'272211	87	2'394935
38	2'264288	88	2'389972	38	2'278735	88	2'395580
39	2'270625	89	2'390721	39	2'284901	89	2'396198
40	2'276633	90	2'391442	40	2'290733	90	2'396791
41	2'282334	91	2'392137	41	2'296253	91	2'397361
42	2'287747	92	2'392808	42	2'301482	92	2'397908
43	2'292890	93	2'393453	43	2'306439	93	2'398432
44	2'297781	94	2'394076	44	2'311140	94	2'398936
45	2'302435	95	2'394676	45	2'315602	95	2'399419
46	2'306867	96	2'395255	46	2'319839	96	2'399883
47	2'311089	97	2'395813	47	2'323866	97	2'400329
48	2'315113	98	2'396350	48	2'327693	98	2'400757
49	2'318952	99	2'396869	49	2'331333	99	2'401168
50	2'322614	100	2'397369	50	2'334798	100	2'401563

## TABLE XII.



Comparison of the Difference in Value between the old or ordinary Table of Present Values, and those calculated at one rate of interest on Capital, and at another rate for its Redemption, at the following rates.

Years	The ordinary or old Table of Present Values, Interest on Capital and for Redemption being 4 per cent.	The new Table of Present Values, Interest for Redemption being 3 per cent. and on Capital 4 per cent.	Difference in Excess of True Value on every £1 Annuity purchased by old Table, in Decimals of a Pound	Difference in Excess of True Value on every £1 Annuity purchased by old Table, in Pounds, Shillings, and Pence	Rate per Cent. lost on the Purchase of every £1 Annuity by the old Table	Years
1	96154	96154	00000	£ s. d.	000	1
2	188610	187754	00856	0 0 2	856	2
3	277509	275080	02429	0 0 5 $\frac{1}{2}$	2429	3
4	362990	358388	04602	0 0 11	4602	4
5	445182	437915	07267	0 1 5 $\frac{1}{2}$	7267	5
6	524214	513881	10333	0 2 0 $\frac{3}{4}$	10333	6
7	600206	586488	13718	0 2 8 $\frac{1}{2}$	13718	7
8	673275	655925	17350	0 3 5 $\frac{1}{2}$	17350	8
9	743533	722367	21166	0 4 2 $\frac{1}{2}$	21166	9
10	811090	785975	25115	0 5 0 $\frac{1}{2}$	25115	10
11	876048	846902	29146	0 5 9 $\frac{1}{2}$	29146	11
12	938507	905288	33219	0 6 7 $\frac{1}{2}$	33219	12
13	998565	961265	37300	0 7 5 $\frac{1}{2}$	37300	13
14	1056312	1014957	41355	0 8 3 $\frac{1}{2}$	41355	14
15	1111839	1066478	45361	0 9 0 $\frac{1}{2}$	45361	15
16	1165230	1115936	49294	0 9 10 $\frac{1}{2}$	49294	16
17	1216567	1163433	53134	0 10 7 $\frac{1}{2}$	53134	17
18	1265930	1209063	56867	0 11 4 $\frac{1}{2}$	56867	18
19	1313394	1252915	60479	0 12 1	60479	19
20	1359033	1295073	63960	0 12 9 $\frac{1}{2}$	63960	20
21	1402916	1335617	67299	0 13 5 $\frac{1}{2}$	67299	21
22	1445112	1374620	70492	0 14 1	70492	22
23	1485684	1412152	73532	0 14 8 $\frac{1}{2}$	73532	23
24	1524696	1448280	76416	0 15 3 $\frac{1}{2}$	76416	24
25	1562208	1483066	79142	0 15 9 $\frac{1}{2}$	79142	25
26	1598277	1516570	81707	0 16 4	81707	26
27	1632959	1548846	84113	0 16 9 $\frac{1}{2}$	84113	27
28	1666306	1579948	86358	0 17 3 $\frac{1}{2}$	86358	28
29	1698371	1609926	88445	0 17 8 $\frac{1}{2}$	88445	29
30	1729203	1638827	90376	0 18 0 $\frac{1}{2}$	90376	30
31	1758849	1666696	92153	0 18 5	92153	31
32	1787355	1693577	93778	0 18 9	93778	32
33	1814765	1719509	95256	0 19 0 $\frac{1}{2}$	95256	33
34	1841120	1744532	96588	0 19 3 $\frac{1}{2}$	96588	34
35	1866461	1768682	97779	0 19 6 $\frac{1}{2}$	97779	35
36	1890828	1791993	98835	0 19 9	98835	36
37	1914258	1814499	99759	0 19 11 $\frac{1}{2}$	99759	37
38	1936786	1836232	100554	1 0 1 $\frac{1}{2}$	100554	38
39	1958448	1857222	101226	1 0 2 $\frac{1}{2}$	101226	39
40	1979277	1877498	101779	1 0 4 $\frac{1}{2}$	101779	40
41	1999305	1897087	102218	1 0 5 $\frac{1}{2}$	102218	41
42	2018563	1916014	102549	1 0 6	102549	42
43	2037079	1934307	102772	1 0 6 $\frac{1}{2}$	102772	43
44	2054884	1951987	102897	1 0 6 $\frac{1}{2}$	102897	44
45	2072004	1969079	102925	1 0 7	102925	45
46	2088465	1985603	102862	1 0 6 $\frac{1}{2}$	102862	46
47	2104294	2001581	102713	1 0 6 $\frac{1}{2}$	102713	47
48	2119513	2017033	102480	1 0 5 $\frac{1}{2}$	102480	48
49	2134147	2031978	102169	1 0 5	102169	49
50	2148218	2046434	101784	1 0 4 $\frac{1}{2}$	101784	50



Comparison of the Difference in Value between the old or ordinary Table of Present Values, and those calculated at one rate of interest on Capital, and at another rate for its Redemption, at the following rates.

Years	The ordinary or old Table of Present Values, Interest on Capital and for Redemption being 5 per cent.	The new Table of Present Values, Interest for Redemption being 3 per cent. and on Capital 5 per cent.	Difference in Excess of True Value on every £1 Annuity purchased by old Table, in Decimals of a Pound	Difference in Excess of True Value on every £1 Annuity purchased by old Table, in Pounds, Shillings, and Pence	Rate per Cent. lost on the Purchase of every £1 Annuity by the old Table	Years
1	95238	95238	00000	£ 0 0 0	000	1
2	185941	184294	01647	0 0 4	1647	2
3	272325	267716	04609	0 0 11½	4609	3
4	354595	345988	08607	0 1 8½	8607	4
5	432948	419543	13405	0 2 8	13405	5
6	507569	488765	18804	0 3 9½	18804	6
7	578637	553997	24640	0 4 11½	24640	7
8	646321	615550	30771	0 6 1½	30771	8
9	710782	673701	37081	0 7 5	37081	9
10	772174	728701	43473	0 8 8½	43473	10
11	830641	780778	49863	0 9 11½	49863	11
12	886325	830137	56188	0 11 2½	56188	12
13	939357	876966	62391	0 12 5½	62391	13
14	989864	921435	68429	0 13 8½	68429	14
15	1037966	963701	74265	0 14 10	74265	15
16	1083777	1003907	79870	0 15 11½	79870	16
17	1127407	1042182	85225	0 17 0½	85225	17
18	1168959	1078647	90312	0 18 0½	90312	18
19	1208532	1113414	95118	0 19 0½	95118	19
20	1246221	1146582	99639	0 19 11½	99639	20
21	1282115	1178248	103867	1 0 9½	103867	21
22	1316300	1208497	107803	1 1 6½	107803	22
23	1348857	1237411	111446	1 2 3½	111446	23
24	1379864	1265063	114801	1 2 11½	114801	24
25	1409395	1291525	117870	1 3 6½	117870	25
26	1437519	1316859	120660	1 4 1½	120660	26
27	1464303	1341126	123177	1 4 7½	123177	27
28	1489813	1364382	125431	1 5 1	125431	28
29	1514107	1386680	127427	1 5 5½	127427	29
30	1537245	1408069	129176	1 5 10	129176	30
31	1559281	1428593	130688	1 6 1½	130688	31
32	1580268	1448297	131971	1 6 4½	131971	32
33	1600255	1467220	133035	1 6 7½	133035	33
34	1619290	1485399	133891	1 6 9½	133891	34
35	1637419	1502871	134548	1 6 11	134548	35
36	1654685	1519669	135016	1 7 0	135016	36
37	1671129	1535824	135305	1 7 0½	135305	37
38	1686789	1551366	135423	1 7 1	135423	38
39	1701704	1566322	135382	1 7 0½	135382	39
40	1715909	1580718	135191	1 7 0½	135191	40
41	1729437	1594581	134856	1 6 11½	134856	41
42	1742321	1607932	134389	1 6 10½	134389	42
43	1754591	1620795	133796	1 6 9	133796	43
44	1766277	1633190	133087	1 6 7½	133087	44
45	1777407	1645138	132269	1 6 5½	132269	45
46	1788007	1656657	131350	1 6 3½	131350	46
47	1798101	1667764	130337	1 6 0½	130337	47
48	1807716	1678478	129238	1 5 10½	129238	48
49	1816872	1688814	128058	1 5 6½	128058	49
50	1825593	1698788	126805	1 5 4½	126805	50

Comparison of the Difference in Value between the old or ordinary Table of Present Values, and those calculated at one rate of interest on Capital, and at another rate for its Redemption, at the following rates.

Years	The ordinary or old Table of Present Values, Interest on Capital and for Redemption being 8 per cent.	The new Table of Present Values, Interest for Redemption being 3 per cent. and on Capital 8 per cent.	Difference in Excess of True Value on every £1: Annuity purchased by old Table, in Decimals of a Pound	Difference in Excess of True Value on every £1: Annuity purchased by old Table, in Pounds, Shillings, and Pence	Rate per Cent. lost on the Purchase of every £1: Annuity by the old Table	Years
1	92593	92593	00000	0 0 0	000	1
2	178327	174639	03688	0 0 9	3688	2
3	257710	247813	09897	0 1 11	9897	3
4	331213	313453	17760	0 3 6	17760	4
5	399271	372641	26630	0 5 4	26630	5
6	462288	426262	36026	0 7 2	36026	6
7	520637	475045	45592	0 9 1	45592	7
8	574664	519598	55066	0 11 0	55066	8
9	624689	560432	64257	0 12 10	64257	9
10	671008	597977	73031	0 14 7	73031	10
11	713896	632601	81295	0 16 3	81295	11
12	753608	664619	88989	0 17 9	88989	12
13	790378	694302	96076	0 19 2	96076	13
14	824424	721884	102540	1 0 6	102540	14
15	855948	747571	108377	1 1 8	108377	15
16	885137	771540	113597	1 2 8	113597	16
17	912164	793950	118214	1 3 7	118214	17
18	937189	814938	122251	1 4 5	122251	18
19	960360	834628	125732	1 5 1	125732	19
20	981815	853128	128687	1 5 8	128687	20
21	1001680	870536	131144	1 6 2	131144	21
22	1020074	886938	133136	1 6 7	133136	22
23	1037106	902414	134692	1 6 11	134692	23
24	1052876	917032	135844	1 7 2	135844	24
25	1067478	930857	136621	1 7 4	136621	25
26	1080998	943946	137052	1 7 5	137052	26
27	1093517	956350	137167	1 7 5	137167	27
28	1105108	968118	136990	1 7 4	136990	28
29	1115841	979291	136550	1 7 3	136550	29
30	1125778	989910	135868	1 7 2	135868	30
31	1134980	1000011	134969	1 6 11	134969	31
32	1143500	1009626	133874	1 6 9	133874	32
33	1151389	1018785	132604	1 6 6	132604	33
34	1158693	1027517	131176	1 6 2	131176	34
35	1165457	1035848	129609	1 5 11	129609	35
36	1171719	1043800	127919	1 5 7	127919	36
37	1177518	1051396	126122	1 5 2	126122	37
38	1182887	1058657	124230	1 4 10	124230	38
39	1187858	1065600	122258	1 4 5	122258	39
40	1192461	1072244	120217	1 4 0	120217	40
41	1196724	1078604	118120	1 3 7	118120	41
42	1200670	1084697	115973	1 3 2	115973	42
43	1204324	1090535	113789	1 2 9	113789	43
44	1207707	1096132	111575	1 2 3	111575	44
45	1210840	1101501	109339	1 1 10	109339	45
46	1213741	1106653	107088	1 1 5	107088	46
47	1216427	1111599	104828	1 0 11	104828	47
48	1218914	1116348	102566	1 0 6	102566	48
49	1221216	1120911	100305	1 0 0	100305	49
50	1223349	1125296	98053	0 19 7	98053	50

Comparison of the Difference in Value between the old or ordinary Table of Present Values, and those calculated at one rate of interest on Capital, and at another rate for its Redemption, at the following rates.

Years	The ordinary or old Table of Present Values, Interest on Capital and for Redemption being 10 per cent.	The new Table of Present Values, Interest for Redemption being 3 per cent. and on Capital 10 per cent.	Difference in Excess of True Value on every £1 Annuity purchased by old Table, in Decimals of a Pound	Difference in Excess of True Value on every £1 Annuity purchased by old Table, in Pounds, Shillings, and Pence	Rate per Cent. lost on the Purchase of every £1 Annuity by the old Table	Years
1	·90909	·90909	·00000	0 0 0	·000	1
2	1·73554	1·68745	·04809	0 0 11½	4·809	2
3	2·48685	2·36111	·12574	0 2 6½	12·574	3
4	3·16987	2·94962	·22025	0 4 4½	22·025	4
5	3·79079	3·46795	·32284	0 6 5½	32·284	5
6	4·35526	3·92777	·42749	0 8 6½	42·749	6
7	4·86842	4·33828	·53014	0 10 7½	53·014	7
8	5·33493	4·70685	·62808	0 12 6½	62·808	8
9	5·75902	5·03946	·71956	0 14 4½	71·956	9
10	6·14457	5·34101	·80356	0 16 1	80·356	10
11	6·49506	5·61553	·87953	0 17 7½	87·953	11
12	6·81369	5·86641	·94728	0 18 11½	94·728	12
13	7·10336	6·09646	1·00690	1 0 1½	100·690	13
14	7·36669	6·30810	1·05859	1 1 2	105·859	14
15	7·60608	6·50336	1·10272	1 2 0½	110·272	15
16	7·82371	6·68401	1·13970	1 2 9½	113·970	16
17	8·02155	6·85154	1·17001	1 3 4½	117·001	17
18	8·20141	7·00728	1·19413	1 3 10½	119·413	18
19	8·36492	7·15237	1·21255	1 4 3	121·255	19
20	8·51356	7·28780	1·22576	1 4 6	122·576	20
21	8·64869	7·41445	1·23424	1 4 8½	123·424	21
22	8·77154	7·53310	1·23844	1 4 9½	123·844	22
23	8·88322	7·64445	1·23877	1 4 9½	123·877	23
24	8·98474	7·74909	1·23565	1 4 8½	123·565	24
25	9·07704	7·84758	1·22946	1 4 7½	122·946	25
26	9·16095	7·94040	1·22055	1 4 5	122·055	26
27	9·23722	8·02799	1·20923	1 4 2½	120·923	27
28	9·30657	8·11075	1·19582	1 3 11	119·582	28
29	9·36961	8·18902	1·18059	1 3 7½	118·059	29
30	9·42691	8·26315	1·16376	1 3 3½	116·376	30
31	9·47901	8·33341	1·14560	1 2 11	114·560	31
32	9·52638	8·40007	1·12631	1 2 6½	112·631	32
33	9·56943	8·46338	1·10605	1 2 1½	110·605	33
34	9·60858	8·52355	1·08503	1 1 8½	108·503	34
35	9·64416	8·58080	1·06336	1 1 3½	106·336	35
36	9·67651	8·63530	1·04121	1 0 10	104·121	36
37	9·70592	8·68722	1·01870	1 0 4½	101·870	37
38	9·73265	8·73673	·99592	0 19 11	99·592	38
39	9·75696	8·78396	·97300	0 19 5½	97·300	39
40	9·77905	8·82906	·94999	0 19 0	94·999	40
41	9·79914	8·87214	·92710	0 18 6½	92·710	41
42	9·81740	8·91332	·90408	0 18 1	90·408	42
43	9·83400	8·95270	·88130	0 17 7½	88·130	43
44	9·84909	8·99039	·85870	0 17 2½	85·870	44
45	9·86281	9·02648	·83633	0 16 8½	83·633	45
46	9·87528	9·06105	·81423	0 16 3½	81·423	46
47	9·88662	9·09417	·79245	0 15 10½	79·245	47
48	9·89693	9·12594	·77099	0 15 5	77·099	48
49	9·90630	9·15641	·74989	0 14 11½	74·989	49
50	9·91481	9·18565	·72916	0 14 7½	72·916	50

Comparison of the Difference in Value between the old or ordinary Table of Present Values, and those calculated at one rate of interest on Capital, and at another rate for its Redemption, at the following rates.

Years	The ordinary or old Table of Present Values, Interest on Capital and for Redemption being 12 per cent.	The new Table of Present Values, Interest for Redemption being 3 per cent. and on Capital 12 per cent.	Difference in Excess of True Value on every £1 Annuity purchased by old Table, Table, in Decimals of a Pound	Difference in Excess of True Value on every £1 Annuity purchased by old Table, in Pounds, Shillings, and Pence	Rate per Cent. lost on the Purchase of every £1 Annuity by the old Table	Years
1	·89286	·89286	·00000	£ 0 0 0	·000	1
2	1·69005	1·63236	·05769	0 1 12	·5769	2
3	2·40183	2·25464	·14719	0 2 11	14·719	3
4	3·03735	2·78531	·25204	0 5 0	25·204	4
5	3·60478	3·24302	·36176	0 7 2	36·176	5
6	4·06131	3·64169	·41962	0 8 4	41·962	6
7	4·56376	3·99191	·57185	0 11 5	57·185	7
8	4·96764	4·30188	·66576	0 13 3	66·576	8
9	5·32825	4·57804	·75021	0 15 0	75·021	9
10	5·65022	4·82554	·82468	0 16 6	82·468	10
11	5·93770	5·04853	·88917	0 17 9	88·917	11
12	6·19437	5·25039	·94398	0 18 10	94·398	12
13	6·42355	5·43391	·98964	0 19 9	98·964	13
14	6·62817	5·60141	1·02676	1 0 6	102·676	14
15	6·81086	5·75485	1·05601	1 1 1	105·601	15
16	6·97399	5·89585	1·07814	1 1 6	107·814	16
17	7·11963	6·02582	1·09381	1 1 10	109·381	17
18	7·24967	6·14595	1·10372	1 2 0	110·372	18
19	7·36578	6·25728	1·10850	1 2 2	110·850	19
20	7·46944	6·36069	1·10875	1 2 2	110·875	20
21	7·56200	6·45695	1·10505	1 2 1	110·505	21
22	7·64465	6·54676	1·09789	1 1 11	109·789	22
23	7·71843	6·63469	1·08374	1 1 8	108·374	23
24	7·78432	6·70927	1·07505	1 1 6	107·505	24
25	7·84314	6·78298	1·06016	1 1 2	106·016	25
26	7·89566	6·85221	1·04345	1 0 10	104·345	26
27	7·94255	6·91734	1·02521	1 0 6	102·521	27
28	7·98442	6·97870	1·00572	1 0 1	100·572	28
29	8·02181	7·03657	·98524	0 19 8	98·524	29
30	8·05518	7·09123	·96395	0 19 3	96·395	30
31	8·08499	7·14291	·94208	0 18 10	94·208	31
32	8·11159	7·19183	·91976	0 18 4	91·976	32
33	8·13535	7·23819	·89716	0 17 11	89·716	33
34	8·15656	7·28216	·87440	0 17 5	87·440	34
35	8·17550	7·32390	·85160	0 17 0	85·160	35
36	8·19241	7·36356	·82885	0 16 6	82·885	36
37	8·20751	7·40129	·80622	0 16 1	80·622	37
38	8·22099	7·43719	·78380	0 15 8	78·380	38
39	8·23303	7·47139	·76164	0 15 2	76·164	39
40	8·24378	7·50399	·73979	0 14 9	73·979	40
41	8·25337	7·53509	·71828	0 14 4	71·828	41
42	8·26194	7·56477	·69717	0 13 11	69·717	42
43	8·26959	7·59312	·67647	0 13 6	67·647	43
44	8·27642	7·62018	·65624	0 13 1	65·624	44
45	8·28252	7·64613	·63639	0 12 8	63·639	45
46	8·28796	7·67092	·61704	0 12 4	61·704	46
47	8·29282	7·69465	·59817	0 11 11	59·817	47
48	8·29716	7·71737	·57979	0 11 7	57·979	48
49	8·30104	7·73915	·56189	0 11 2	56·189	49
50	8·30450	7·76003	·54447	0 10 10	54·447	50

Comparison of the Difference in Value between the old or ordinary Table of Present Values, and those calculated at one rate of interest on Capital, and at another rate for its Redemption, at the following rates.

Years	The ordinary or old Table of Present Values, Interest on Capital, and for Redemption being 15 per cent.	The new Table of Present Values, Interest for Redemption being 3 per cent. and on Capital 15 per cent.	Difference in Excess of True Value on every £1 Annuity purchased by old Table, in Decimals of a Pound	Difference in Excess of True Value on every £1 Annuity purchased by old Table, in Pounds, Shillings, and Pence	Rate per Cent. lost on the Purchase of every £1 Annuity by the old Table	Years
1	·86957	·86957	·00000	£ s. d. 0 0 0	·000	1
2	1·62571	1·55615	·06956	0 1 4½	6·956	2
3	2·28323	2·11180	·17143	0 3 5	17·143	3
4	2·85498	2·57052	·28446	0 5 8½	28·446	4
5	3·35216	2·95548	·39668	0 7 11	39·668	5
6	3·78448	3·28302	·50146	0 10 0½	50·146	6
7	4·16042	3·56498	·59544	0 11 10½	59·544	7
8	4·48732	3·81016	·67716	0 13 6½	67·716	8
9	4·76287	4·02522	·73765	0 14 9	73·765	9
10	5·01877	4·21531	·80346	0 16 9½	80·346	10
11	5·23371	4·38448	·84923	0 16 11½	84·923	11
12	5·42062	4·53593	·88469	0 17 8½	88·469	12
13	5·58315	4·67225	·91090	0 18 2½	91·090	13
14	5·72448	4·79556	·92892	0 18 6½	92·892	14
15	5·84737	4·90758	·93979	0 18 9½	93·979	15
16	5·95423	5·00975	·94448	0 18 10½	94·448	16
17	6·04716	5·10328	·94388	0 18 10½	94·388	17
18	6·12797	5·18918	·93879	0 18 9½	93·879	18
19	6·19631	5·26832	·92799	0 18 6½	92·799	19
20	6·25933	5·34143	·91790	0 18 4½	91·790	20
21	6·31246	5·40915	·90331	0 18 0½	90·331	21
22	6·35866	5·47203	·88663	0 17 8½	88·663	22
23	6·39884	5·53055	·86829	0 17 4½	86·829	23
24	6·43377	5·58511	·84866	0 16 11½	84·866	24
25	6·46415	5·63609	·82806	0 16 6½	82·806	25
26	6·49056	5·68381	·80675	0 16 1½	80·675	26
27	6·51353	5·72855	·78498	0 15 8½	78·498	27
28	6·53351	5·77057	·76294	0 15 3	76·294	28
29	6·55088	5·81008	·74080	0 14 9½	74·080	29
30	6·56684	5·84729	·71955	0 14 4½	71·955	30
31	6·57911	5·88239	·69672	0 13 11	69·672	31
32	6·59053	5·91528	·67525	0 13 6	67·525	32
33	6·60046	5·94685	·65761	0 13 1½	65·761	33
34	6·60910	5·97650	·63260	0 12 7½	63·260	34
35	6·61661	6·00459	·61202	0 12 2½	61·202	35
36	6·62314	6·03123	·59191	0 11 10	59·191	36
37	6·62881	6·05651	·57230	0 11 5½	57·230	37
38	6·63375	6·08053	·55322	0 11 0½	55·322	38
39	6·63805	6·10337	·53468	0 10 8½	53·468	39
40	6·64178	6·12511	·51667	0 10 4	51·667	40
41	6·64502	6·14581	·49921	0 9 11½	49·921	41
42	6·64785	6·16554	·48231	0 9 7½	48·231	42
43	6·65030	6·18436	·46544	0 9 3½	46·544	43
44	6·65244	6·20233	·45011	0 9 0	45·011	44
45	6·65429	6·21948	·43481	0 8 8½	43·481	45
46	6·65591	6·23587	·42004	0 8 4½	42·004	46
47	6·65731	6·25154	·40577	0 8 1½	40·577	47
48	6·65853	6·26654	·39199	0 7 10	39·199	48
49	6·65959	6·28089	·37870	0 7 6½	37·870	49
50	6·66051	6·29463	·36588	0 7 3½	36·588	50

Comparison of the Difference in Value between the old or ordinary Table of Present Values, and those calculated at one rate of interest on Capital, and at another rate for its Redemption, at the following rates.

Years	The ordinary or old Table of Present Values, Interest on Capital and for Redemption being 18 per cent.	The new Table of Present Values, Interest for Redemption being 3 per cent. and on Capital 18 per cent.	The Difference in Excess of True Value on every £1 Annuity purchased by old Table, in Decimals of a Pound	The Difference in Excess of True Value on every £1 Annuity purchased by old Table, in Pounds, Shillings, and Pence	Rate per Cent. lost on the Purchase of every £1 Annuity by the old Table	Years
1	·84746	·84746	·00000	£ 0 0 0	·000	1
2	1·56564	1·48674	·07890	0 1 6½	7·890	2
3	2·17427	1·98598	·18829	0 3 9	18·829	3
4	2·65006	2·38648	·26358	0 5 3½	26·358	4
5	3·12717	2·71478	·41239	0 8 2½	41·239	5
6	3·49760	2·98867	·50893	0 10 2	50·893	6
7	3·81153	3·22055	·59098	0 11 9½	59·098	7
8	4·07757	3·41931	·65826	0 13 1½	65·826	8
9	4·30302	3·59152	·71150	0 14 2½	71·150	9
10	4·49409	3·74209	·75200	0 15 0	75·200	10
11	4·65601	3·87481	·78120	0 15 7½	78·120	11
12	4·79322	3·99262	·80060	0 16 0	80·060	12
13	4·90951	4·09786	·81165	0 16 2½	81·165	13
14	5·00806	4·19241	·81565	0 16 3½	81·565	14
15	5·09158	4·27777	·81381	0 16 3½	81·381	15
16	5·16235	4·35519	·80716	0 16 1½	80·716	16
17	5·22233	4·42571	·79662	0 15 11	79·662	17
18	5·27177	4·49017	·78160	0 15 7½	78·160	18
19	5·31624	4·54930	·76694	0 15 4	76·694	19
20	5·35275	4·60372	·74903	0 14 11½	74·903	20
21	5·38368	4·65394	·72974	0 14 7	72·974	21
22	5·40990	4·70041	·70949	0 14 2½	70·949	22
23	5·43212	4·74352	·68860	0 13 9½	68·860	23
24	5·45095	4·78360	·66735	0 13 4	66·735	24
25	5·46691	4·82095	·64596	0 12 11	64·596	25
26	5·48043	4·85582	·62461	0 12 5½	62·461	26
27	5·49189	4·88844	·60345	0 12 0½	60·345	27
28	5·50160	4·91900	·58260	0 11 7½	58·260	28
29	5·50983	4·94769	·56214	0 11 2½	56·214	29
30	5·51681	4·97465	·54216	0 10 10	54·216	30
31	5·52272	5·00003	·52269	0 10 5½	52·269	31
32	5·52773	5·02395	·50378	0 10 0½	50·378	32
33	5·53197	5·04653	·48544	0 9 8½	48·544	33
34	5·53557	5·06786	·46771	0 9 4½	46·771	34
35	5·53862	5·08804	·45058	0 9 0	45·058	35
36	5·54089	5·10715	·43374	0 8 8	43·374	36
37	5·54327	5·12527	·41800	0 8 4½	41·800	37
38	5·54525	5·14246	·40279	0 8 0½	40·279	38
39	5·54682	5·15879	·38803	0 7 9	38·803	39
40	5·54815	5·17431	·37384	0 7 5½	37·384	40
41	5·54928	5·18908	·36020	0 7 2	36·020	41
42	5·55024	5·20314	·34710	0 6 11½	34·710	42
43	5·55105	5·21654	·33451	0 6 8½	33·451	43
44	5·55174	5·22931	·32243	0 6 5½	32·243	44
45	5·55232	5·24150	·31082	0 6 2½	31·082	45
46	5·55281	5·25313	·29978	0 5 11½	29·978	46
47	5·55322	5·26425	·28897	0 5 9	28·897	47
48	5·55359	5·27488	·27871	0 5 6½	27·871	48
49	5·55389	5·28505	·26884	0 5 4½	26·884	49
50	5·55414	5·29477	·25937	0 5 2½	25·937	50

Comparison of the Difference in Value between the old or ordinary Table of Present Values, and those calculated at one rate of interest on Capital, and at another rate for its Redemption, at the following rates.

Years	The ordinary or old Table of Present Values, Interest on Capital and for Redemption being so per cent.	The new Table of Present Values, Interest for Redemption being 3 per cent. and on Capital so per cent.	The Difference in Excess of True Value on every £1 Annuity purchased by old Table, in Decimals of a Pound	The Difference in Excess of True Value on every £1 Annuity purchased by old Table, in Pounds, Shillings, and Pence	Rate per Cent. lost on the Purchase of every £1 Annuity by the old Table	Years
1	·83333	·83333	·00000	0 0 0	·000	1
2	1·52778	1·44381	·08397	0 1 8	8·397	2
3	2·10648	1·91011	·19637	0 3 11	19·637	3
4	2·58873	2·27776	·31097	0 6 2½	31·097	4
5	2·99061	2·57497	·41564	0 8 3½	41·564	5
6	3·32551	2·82010	·50541	0 10 1½	50·541	6
7	3·60459	3·02566	·57893	0 11 6½	57·893	7
8	3·83716	3·20045	·63671	0 12 8½	63·671	8
9	4·03097	3·35083	·68014	0 13 7	68·014	9
10	4·19247	3·48152	·71095	0 14 2½	71·095	10
11	4·32706	3·59612	·73094	0 14 7½	73·094	11
12	4·43922	3·69738	·74184	0 14 10	74·184	12
13	4·53268	3·78745	·74523	0 14 10½	74·523	13
14	4·61057	3·86808	·74249	0 14 10	74·249	14
15	4·67547	3·94063	·73484	0 14 8½	73·484	15
16	4·72956	4·00624	·72332	0 14 5½	72·332	16
17	4·77463	4·06583	·70880	0 14 2	70·880	17
18	4·81219	4·12017	·69202	0 13 10	69·202	18
19	4·84584	4·16990	·67594	0 13 6	67·594	19
20	4·86887	4·21557	·65330	0 13 0½	65·330	20
21	4·89132	4·25764	·63368	0 12 8	63·368	21
22	4·90943	4·29650	·61293	0 12 3	61·293	22
23	4·92453	4·33249	·59204	0 11 10	59·204	23
24	4·93710	4·36591	·57119	0 11 5	57·119	24
25	4·94759	4·39700	·55059	0 11 0	55·059	25
26	4·95632	4·42599	·53033	0 10 7½	53·033	26
27	4·96360	4·45307	·51053	0 10 2	51·053	27
28	4·96967	4·47842	·49125	0 9 9½	49·125	28
29	4·97472	4·50218	·47254	0 9 5½	47·254	29
30	4·97894	4·52449	·45445	0 9 1	45·445	30
31	4·98245	4·54548	·43697	0 8 8½	43·697	31
32	4·98537	4·56524	·42013	0 8 4½	42·013	32
33	4·98784	4·58387	·40397	0 8 0½	40·397	33
34	4·98984	4·60147	·38837	0 7 9	38·837	34
35	4·99154	4·61810	·37344	0 7 5½	37·344	35
36	4·99295	4·63384	·35911	0 7 2	35·911	36
37	4·99412	4·64875	·34537	0 6 10½	34·537	37
38	4·99510	4·66289	·33221	0 6 7½	33·221	38
39	4·99592	4·67631	·31961	0 6 4½	31·961	39
40	4·99660	4·68906	·30754	0 6 1½	30·754	40
41	4·99717	4·70118	·29597	0 5 11	29·597	41
42	4·99764	4·71272	·28492	0 5 8½	28·492	42
43	4·99803	4·72371	·27432	0 5 5½	27·432	43
44	4·99836	4·73418	·26418	0 5 3½	26·418	44
45	4·99863	4·74417	·25446	0 5 1	25·446	45
46	4·99886	4·75370	·24516	0 4 10½	24·516	46
47	4·99905	4·76280	·23625	0 4 8½	23·625	47
48	4·99921	4·77150	·22771	0 4 6½	22·771	48
49	4·99934	4·77981	·21953	0 4 4½	21·953	49
50	4·99945	4·78777	·21168	0 4 2½	21·618	50

## TABLE XIII.

N





Present Value of £1 per Annum in  $n$  years, Redemption of Capital  
being at 2 and  $2\frac{1}{2}$  per cent., with Interest allowed to a Purchaser at the  
same rates per cent.

$n$ Years	2 per cent.	$n$ Years	2 per cent.	$n$ Years	$2\frac{1}{2}$ per cent.	$n$ Years	$2\frac{1}{2}$ per cent.
1	98039	51	3178785	1	97561	51	2864616
2	194156	52	3214495	2	192742	52	2892308
3	288388	53	3249505	3	285602	53	2919325
4	380773	54	3283828	4	376197	54	2945683
5	471346	55	3317479	5	464583	55	2971398
6	560143	56	3350469	6	550813	56	2996456
7	647199	57	3382813	7	634939	57	3020962
8	732548	58	3415523	8	717014	58	3044841
9	816224	59	3445610	9	797087	59	3068137
10	898259	60	3476089	10	875206	60	3090866
11	978685	61	3505969	11	951421	61	3113040
12	1057534	62	3535264	12	1025777	62	3134673
13	1134837	63	3563984	13	1098319	63	3155778
14	1210625	64	3592142	14	1169091	64	3176369
15	1284926	65	3619747	15	1238138	65	3196458
16	1357771	66	3646810	16	1305500	66	3216056
17	1429187	67	3673344	17	1371220	67	3235177
18	1499203	68	3699356	18	1435336	68	3253831
19	1567846	69	3724859	19	1497889	69	3272031
20	1635143	70	3749862	20	1558916	70	3289786
21	1701121	71	3774374	21	1618455	71	3307108
22	1765805	72	3798406	22	1676541	72	3324008
23	1829220	73	3821967	23	1732211	73	3340495
24	1891393	74	3845066	24	1788499	74	3356581
25	1952346	75	3867711	25	1842438	75	3372274
26	2012104	76	3889913	26	1895061	76	3387584
27	2070690	77	3911680	27	1946401	77	3402521
28	2128127	78	3933019	28	1996489	78	3417094
29	2184439	79	3953940	29	2045355	79	3431311
30	2239646	80	3974451	30	2093029	80	3445182
31	2293770	81	3994560	31	2139541	81	3458714
32	2346834	82	4014275	32	2184918	82	3471916
33	2398856	83	4033603	33	2229188	83	3484796
34	2449859	84	4052552	34	2272379	84	3497362
35	2499862	85	4071129	35	2314516	85	3509622
36	2548884	86	4089342	36	2355625	86	3521582
37	2596945	87	4107198	37	2395732	87	3533251
38	2644064	88	4124704	38	2434860	88	3544635
39	2690259	89	4141867	39	2473034	89	3555741
40	2735548	90	4158693	40	2510278	90	3566577
41	2779949	91	4175189	41	2546612	91	3577148
42	2823479	92	4191362	42	2582061	92	3587462
43	2866156	93	4207218	43	2616645	93	3597524
44	2907996	94	4222762	44	2650385	94	3607340
45	2949016	95	4238002	45	2683302	95	3616917
46	2989231	96	4252943	46	2715417	96	3626261
47	3028658	97	4267592	47	2746748	97	3635376
48	3067312	98	4281953	48	2777315	98	3644269
49	3105208	99	4296032	49	2807137	99	3652946
50	3142361	100	4309835	50	2836231	100	3661411

Present Value of £1 per Annum in  $n$  years, Redemption of Capital  
being at 3 and  $3\frac{1}{2}$  per cent., with Interest allowed to a Purchaser at the  
same rates per cent.

$n$ Years	3 per cent.	$n$ Years	3 per cent.	$n$ Years	$3\frac{1}{2}$ per cent.	$n$ Years	$3\frac{1}{2}$ per cent.
1	97087	51	25'95123	1	96618	51	23'62862
2	1'91347	52	26'16624	2	1'89969	52	23'79577
3	2'82861	53	26'37499	3	2'80164	53	23'95726
4	3'71710	54	26'57766	4	3'67308	54	24'11330
5	4'57971	55	26'77443	5	4'51505	55	24'26405
6	5'41719	56	26'96546	6	5'32855	56	24'40971
7	6'23028	57	27'15094	7	6'11454	57	24'55045
8	7'01969	58	27'33101	8	6'87396	58	24'68642
9	7'78611	59	27'50583	9	7'60769	59	24'81780
10	8'53020	60	27'67556	10	8'31661	60	24'94473
11	9'25262	61	27'84035	11	9'00155	61	25'06738
12	9'95400	62	28'00034	12	9'66333	62	25'18587
13	10'63496	63	28'15567	13	10'30274	63	25'30036
14	11'29607	64	28'30648	14	10'92052	64	25'41097
15	11'93794	65	28'45289	15	11'51741	65	25'51785
16	12'56100	66	28'59504	16	12'09412	66	25'62111
17	13'16612	67	28'73305	17	12'65132	67	25'72088
18	13'75351	68	28'86704	18	13'18968	68	25'81726
19	14'32380	69	28'99712	19	13'70984	69	25'91041
20	14'87748	70	29'12342	20	14'21240	70	26'00040
21	15'41502	71	29'24604	21	14'69797	71	26'08734
22	15'93692	72	29'36509	22	15'16713	72	26'17134
23	16'44361	73	29'48067	23	15'62041	73	26'25251
24	16'93554	74	29'59288	24	16'05837	74	26'33092
25	17'41315	75	29'70183	25	16'48152	75	26'40669
26	17'87684	76	29'80760	26	16'89035	76	26'47989
27	18'32703	77	29'91029	27	17'28537	77	26'55062
28	18'76412	78	30'01000	28	17'66702	78	26'61896
29	19'18856	79	30'10679	29	18'03577	79	26'68498
30	19'60044	80	30'20076	30	18'39205	80	26'74878
31	20'00043	81	30'29200	31	18'73628	81	26'81041
32	20'38877	82	30'38059	32	19'06887	82	26'86996
33	20'76579	83	30'46659	33	19'39021	83	26'92750
34	21'13184	84	30'55009	34	19'70068	84	26'98309
35	21'48722	85	30'63115	35	20'00066	85	27'03680
36	21'83225	86	30'70986	36	20'29049	86	27'08870
37	22'16724	87	30'78627	37	20'57053	87	27'13884
38	22'49246	88	30'86045	38	20'84109	88	27'18729
39	22'80822	89	30'93248	39	21'10258	89	27'23409
40	23'11477	90	31'00241	40	21'35507	90	27'27932
41	23'41240	91	31'07030	41	21'59910	91	27'32301
42	23'70136	92	31'13621	42	21'83488	92	27'36523
43	23'98190	93	31'20021	43	22'06269	93	27'40602
44	24'25427	94	31'26234	44	22'28279	94	27'45543
45	24'51871	95	31'32266	45	22'49545	95	27'48350
46	24'77545	96	31'38122	46	22'70092	96	27'52029
47	25'02471	97	31'43808	47	22'89944	97	27'55584
48	25'26671	98	31'49328	48	23'09124	98	27'59018
49	25'50166	99	31'54687	49	23'27656	99	27'62337
50	25'72976	100	31'59891	50	23'45562	100	27'65543

TABLE XIV.

Present Value of £1 per Annum in  $n$  years. Redemption of Capital being at 3 per cent., with Interest allowed to a Purchaser at the following rates per cent.:—

$n$ Years	30 per cent.	35 per cent.	40 per cent.	45 per cent.	$n$ Years
1	·7692	·7407	·7143	·6897	1
3	1·6038	1·4847	1·3821	1·2928	3
5	2·0477	1·8575	1·6997	1·5665	5
6	2·1997	1·9818	1·8031	1·6540	6
8	2·4245	2·1624	1·9514	1·7779	8
10	2·5826	2·2871	2·0524	1·8614	10
12	2·6993	2·3783	2·1256	1·9214	12
15	2·8267	2·4767	2·2038	1·9850	15
20	2·9655	2·5825	2·2877	2·0525	20
22	3·0053	2·6127	2·3108	2·0715	22
25	3·0541	2·6495	2·3396	2·0946	25
27	3·0811	2·6698	2·3554	2·1072	27
30	3·1151	2·6953	2·3752	2·1231	30
32	3·1343	2·7097	2·3864	2·1320	32
35	3·1592	2·7282	2·3915	2·1434	35
37	3·1735	2·7389	2·4090	2·1500	37
40	3·1922	2·7528	2·4198	2·1586	40
42	3·2032	2·7610	2·4261	2·1636	42
45	3·2177	2·7702	2·4344	2·1702	45
47	3·2262	2·7781	2·4393	2·1741	47
50	3·2377	2·7866	2·4458	2·1793	50
52	3·2445	2·7916	2·4497	2·1824	52
55	3·2536	2·7984	2·4549	2·1865	55
57	3·2591	2·8024	2·4580	2·1890	57
60	3·2666	2·8079	2·4622	2·1923	60
65	3·2771	2·8157	2·4682	2·1971	65
70	3·2858	2·8222	2·4732	2·2010	70
75	3·2931	2·8275	2·4773	2·2043	75
80	3·2991	2·8320	2·4807	2·2070	80
90	3·3085	2·8388	2·4866	2·2111	90
100	3·3151	2·8438	2·4898	2·2141	100

TABLE XV.

Present Value (or Years' Purchase) of £1 per Annum in  
 n years, after t years' Deference. Redemption of Capital being at  
 3 per cent., with Interest allowed to a Purchaser at 30 per cent.

n Years	Deferred 1 Year	Deferred 2 Years	Deferred 3 Years	Deferred 4 Years	Deferred 5 Years	n Years
1	·5917	·4552	·3501	·2693	·2072	1
3	1·2337	·9490	·7305	·5615	·4320	3
5	1·5752	1·2117	·9321	·7205	·5515	5
6	1·6921	1·3016	1·2374	·7702	·5924	6
8	1·8650	1·4346	1·1036	·8489	·6530	8
10	1·9866	1·5282	1·1755	·9042	·6956	10
12	2·0764	1·5972	1·2290	·9451	·7270	12
15	2·1744	1·6726	1·2866	·9897	·7613	15
20	2·2812	1·7547	1·3500	1·0383	·7987	20
22	2·3118	1·7783	1·3679	1·0522	·8094	22
25	2·3493	1·8072	1·3901	1·0693	·8226	25
27	2·3701	1·8231	1·4024	1·0788	·8298	27
30	2·3962	1·8433	1·4179	1·0907	·8390	30
32	2·4110	1·8546	1·4266	1·0974	·8442	32
35	2·4302	1·8694	1·4380	1·1061	·8509	35
37	2·4412	1·8778	1·4445	1·1111	·8547	37
40	2·4555	1·8889	1·4530	1·1177	·8598	40
42	2·4639	1·8953	1·4580	1·1215	·8627	42
45	2·4752	1·9040	1·4646	1·1266	·8666	45
47	2·4817	1·9659	1·5122	1·1632	·8689	47
50	2·4905	1·9666	1·5128	1·1637	·8720	50
52	2·4958	1·9670	1·5131	1·1639	·8738	52
55	2·5028	1·9676	1·5135	1·1643	·8763	55
57	2·5070	1·9679	1·5138	1·1645	·8778	57
60	2·5128	1·9684	1·5141	1·1647	·8798	60
65	2·5214	1·9690	1·5146	1·1651	·8825	65
70	2·5275	1·9695	1·5150	1·1654	·8850	70
75	2·5332	1·9700	1·5154	1·1657	·8869	75
80	2·5378	1·9704	1·5157	1·1659	·8885	80
90	2·5450	1·9709	1·5161	1·1662	·8911	90
100	2·5501	1·9713	1·5146	1·1665	·8929	100

TABLE XVI.

Present Value (or Years' Purchase) of £1 per Annum in  
 n years, after t years' Deference. Redemption of Capital being at  
 3 per cent., with Interest allowed to a Purchaser at 35 per cent.

n Years	Deferred 1 Year	Deferred 2 Years	Deferred 3 Years	Deferred 4 Years	Deferred 5 Years	n Years
1	'5561	'4064	'3011	'2230	'1652	1
3	1'1146	'8146	'6034	'4470	'3311	3
5	1'3945	1'0192	'7550	'5592	'4142	5
6	1'4878	1'0874	'8055	'5967	'4420	6
8	1'6234	1'1865	'8789	'6510	'4822	8
10	1'7170	1'2549	'9296	'6886	'5100	10
12	1'7855	1'3049	'9666	'7160	'5504	12
15	1'8594	1'3589	1'0066	'7457	'5523	15
20	1'9388	1'4170	1'0496	'7775	'5759	20
22	1'9615	1'4336	1'0619	'7886	'5827	22
25	1'9891	1'4538	1'0769	'7977	'5909	25
27	2'0043	1'4610	1'0822	'8017	'5938	27
30	2'0235	1'4789	1'0955	'8115	'6011	30
32	2'0343	1'4868	1'1013	'8158	'6043	32
35	2'0482	1'4969	1'1088	'8214	'6084	35
37	2'0562	1'5028	1'1132	'8246	'6108	37
40	2'0666	1'5104	1'1188	'8288	'6139	40
42	2'0728	1'5149	1'1222	'8313	'6157	42
45	2'0797	1'5200	1'1259	'8340	'6178	45
47	2'0856	1'5243	1'1291	'8364	'6196	47
50	2'0920	1'5290	1'1326	'8390	'6214	50
52	2'0958	1'5317	1'1346	'8407	'6226	52
55	2'1009	1'5355	1'1374	'8425	'6241	55
57	2'1039	1'5376	1'1390	'8436	'6250	57
60	2'1080	1'5407	1'1412	'8454	'6262	60
65	2'1139	1'5449	1'1444	'8477	'6279	65
70	2'1187	1'5485	1'1471	'8497	'6294	70
75	2'1227	1'5514	1'1492	'8513	'6306	75
80	2'1261	1'5539	1'1511	'8527	'6316	80
90	2'1312	1'5576	1'1538	'8547	'6331	90
100	2'1350	1'5604	1'1558	'8562	'6342	100

TABLE XVII.

Present Value (or Years' Purchase) of £1 per Annum in  
 n years, after t years' Deference. Redemption of Capital being at  
 3 per cent., with Interest allowed to a Purchaser at 40 per cent.

n Years	Deferred 1 Year	Deferred 2 Years	Deferred 3 Years	Deferred 4 Years	Deferred 5 Years	n Years
1	·5102	·3644	·2603	·1859	·1328	1
3	·9872	·7052	·5037	·3598	·2570	3
5	1·2141	·8672	·6194	·4424	·3160	5
6	1·2880	·9200	·6571	·4694	·3353	6
8	1·3939	·9956	·7111	·5080	·3628	8
10	1·4660	1·0470	·7480	·5343	·3818	10
12	1·5183	1·0845	·7746	·5533	·3952	12
15	1·5747	1·1244	·8031	·5737	·4098	15
20	1·6344	1·1672	·8337	·5953	·4254	20
22	1·6508	1·1790	·8421	·6015	·4296	22
25	1·6712	1·1937	·8526	·6090	·4350	25
27	1·6824	1·2016	·8584	·6131	·4379	27
30	1·6986	1·2119	·8656	·6183	·4416	30
32	1·7046	1·2177	·8697	·6212	·4439	32
35	1·7082	1·2202	·8715	·6225	·4447	35
37	1·7207	1·2291	·8779	·6271	·4479	37
40	1·7284	1·2346	·8818	·6300	·4499	40
42	1·7329	1·2378	·8841	·6315	·4511	42
45	1·7389	1·2421	·8872	·6337	·4526	45
47	1·7424	1·2446	·8890	·6350	·4535	47
50	1·7470	1·2479	·8913	·6367	·4547	50
52	1·7498	1·2499	·8927	·6384	·4555	52
55	1·7535	1·2525	·8946	·6390	·4564	55
57	1·7557	1·2541	·8958	·6398	·4570	57
60	1·7587	1·2562	·8973	·6409	·4578	60
65	1·7630	1·2593	·8995	·6425	·4589	65
70	1·7666	1·2619	·9013	·6438	·4598	70
75	1·7695	1·2639	·9028	·6449	·4606	75
80	1·7719	1·2656	·9040	·6458	·4612	80
90	1·7757	1·2684	·9060	·6471	·4622	90
100	1·7784	1·2703	·9074	·6481	·4629	100

## TABLE XVIII.

Present Value (or Years' Purchase) of £1 per Annum in  
 n years, after t years' Deference. Redemption of Capital being at  
 3 per cent., with Interest allowed to a Purchaser at 45 per cent.

n Years	Deferred 1 Year	Deferred 2 Years	Deferred 3 Years	Deferred 4 Years	Deferred 5 Years	n Years
1	·4757	3280	·2262	·1560	·1084	1
3	·8916	·6149	·4241	·2925	·2017	3
5	1·0803	·7451	·5138	·3544	·2444	5
6	1·1407	·7867	·5425	·3742	·2581	6
8	1·2261	·8456	·5832	·4024	·2774	8
10	1·2837	·8853	·6106	·4211	·2904	10
12	1·3251	·9139	·6303	·4347	·2998	12
15	1·3690	·9441	·6511	·4490	·3097	15
20	1·4155	·9762	·6733	·4643	·3202	20
22	1·4286	·9852	·6793	·4686	·3232	22
25	1·4445	·9962	·6871	·4738	·3268	25
27	1·4532	1·0022	·6912	·4767	·3288	27
30	1·4642	1·0098	·6964	·4803	·3312	30
32	1·4703	1·0140	·6993	·4823	·3326	32
35	1·4782	1·0194	·7031	·4849	·3344	35
37	1·4827	1·0226	·7052	·4864	·3354	37
40	1·4887	1·0267	·7081	·4883	·3368	40
42	1·4927	1·0291	·7097	·4894	·3376	42
45	1·4967	1·0322	·7119	·4909	·3386	45
47	1·4994	1·0340	·7131	·4918	·3392	47
50	1·5030	1·0365	·7149	·4930	·3400	50
52	1·5051	1·0380	·7159	·4937	·3405	52
55	1·5079	1·0399	·7172	·4946	·3411	55
57	1·5096	1·0416	·7180	·4952	·3415	57
60	1·5119	1·0427	·7191	·4961	·3420	60
65	1·5152	1·0450	·7207	·4970	·3428	65
70	1·5172	1·0468	·7220	·4979	·3434	70
75	1·5202	1·0484	·7231	·4987	·3439	75
80	1·5221	1·0497	·7239	·5003	·3443	80
90	1·5249	1·0516	·7253	·5008	·3450	90
100	1·5270	1·0531	·7263	·5009	·3454	100









TK272 .H82  
Engineer's valuing assistant; being  
Kummel Library AP07181

TN 272.H82

Hoskold, H. D.

**AUTHOR**

Engineer's Valuing Assistant  
TITLE

**TITLE**

DATE DUE

**BORROWER'S NAME**

DATE DUE

[illegible]

